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dis hist

     (FILE 'HOME' ENTERED AT 15:03:59 ON 17 MAY 2007)

     FILE 'CASREACT' ENTERED AT 15:04:19 ON 17 MAY 2007
L1              STRUCTURE UPLOADED
L2            0 S L1 SSS SAM
L3           11 S L1 SSS FULL

     FILE 'CAPLUS' ENTERED AT 15:09:04 ON 17 MAY 2007
L4           62 S 2-DEOXY-L-RIBOSE
L5           44 S L4 AND (PRODUCTION OR PRODUCING OR MAKING OR SYNTHE? OR PROCE
L6           12 S L5 AND 2-DEOXY-D-RIBOSE
L7           14 S KANG JAE-SUNG/AU
L8            2 S L7 AND 2-DEOXY-L-RIBOSE
L9           10 S YUN MI-HONG/AU
L10           2 S L9 AND 2-DEOXY-L-RIBOSE
L11          54 S LEE SANG-DAE/AU
L12           2 S L11 AND 2-DEOXY-L-RIBOSE
L13           1 S JEON BYOUNG-CHAN/AU
L14           4 S SHIN JEONG-AH/AU

     FILE 'CASREACT' ENTERED AT 15:23:03 ON 17 MAY 2007
L15             STRUCTURE UPLOADED
L16           0 S L15 FULL
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Connecting via Winsock to STN

Welcome to STN International! Enter x:x

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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	JAN 08	CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS 3	JAN 16	CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS 4	JAN 16	IPC version 2007.01 thesaurus available on STN
NEWS 5	JAN 16	WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS 6	JAN 22	CA/CAplus updated with revised CAS roles
NEWS 7	JAN 22	CA/CAplus enhanced with patent applications from India
NEWS 8	JAN 29	PHAR reloaded with new search and display fields
NEWS 9	JAN 29	CAS Registry Number crossover limit increased to 300,000 in multiple databases
NEWS 10	FEB 15	PATDPASPC enhanced with Drug Approval numbers
NEWS 11	FEB 15	RUSSIAPAT enhanced with pre-1994 records
NEWS 12	FEB 23	KOREAPAT enhanced with IPC 8 features and functionality
NEWS 13	FEB 26	MEDLINE reloaded with enhancements
NEWS 14	FEB 26	EMBASE enhanced with Clinical Trial Number field
NEWS 15	FEB 26	TOXCENTER enhanced with reloaded MEDLINE
NEWS 16	FEB 26	IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 17	FEB 26	CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases
NEWS 18	MAR 15	WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 19	MAR 16	CASREACT coverage extended
NEWS 20	MAR 20	MARPAT now updated daily
NEWS 21	MAR 22	LWPI reloaded
NEWS 22	MAR 30	RDISCLOSURE reloaded with enhancements
NEWS 23	APR 02	JICST-EPLUS removed from database clusters and STN
NEWS 24	APR 30	GENBANK reloaded and enhanced with Genome Project ID field
NEWS 25	APR 30	CHEMCATS enhanced with 1.2 million new records
NEWS 26	APR 30	CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 27	APR 30	INPADOC replaced by INPADOCDB on STN
NEWS 28	MAY 01	New CAS web site launched
NEWS 29	MAY 08	CA/CAplus Indian patent publication number format defined
NEWS 30	MAY 14	RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS EXPRESS		NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS		STN Operating Hours Plus Help Desk Availability
NEWS LOGIN		Welcome Banner and News Items
NEWS IPC8		For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 15:03:59 ON 17 MAY 2007

=> file casreact
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CASREACT' ENTERED AT 15:04:19 ON 17 MAY 2007
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
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FILE CONTENT:1840 - 12 May 2007 VOL 146 ISS 21

New CAS Information Use Policies, enter HELP USAGETERMS for details.

****
*
* CASREACT now has more than 12 million reactions
*
****

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>
Uploading C:\Program Files\Stnexp\Queries\10521022.str

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

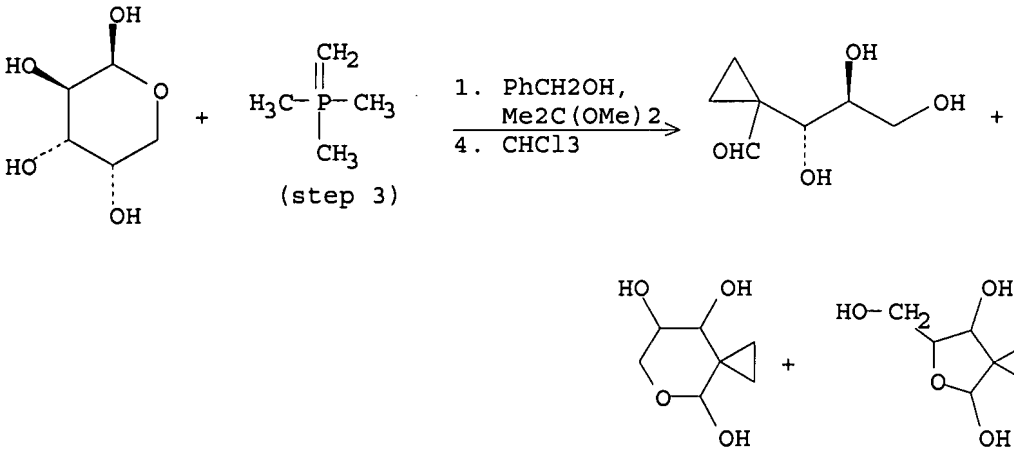
=> s l1 sss sam
SAMPLE SEARCH INITIATED 15:05:24 FILE 'CASREACT'
SCREENING COMPLETE - 1473 REACTIONS TO VERIFY FROM 91 DOCUMENTS

100.0% DONE 1473 VERIFIED 0 HIT RXNS 0 DOCS
SEARCH TIME: 00.00.01

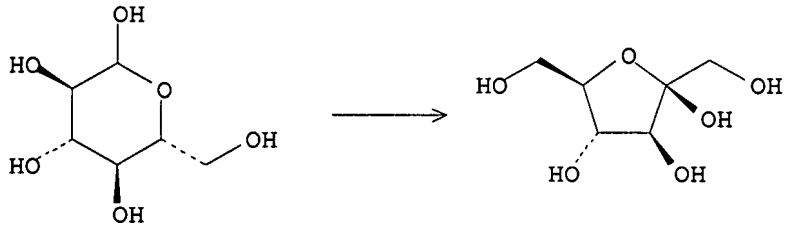
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED VERIFICATIONS: 27160 TO 31760
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1 (0 REACTIONS)

```
=> s l1 exact
'EXACT' IS NOT A VALID SEARCH TYPE
For an explanation, enter "HELP SEARCH TYPES"

=> s l1 sss full
FULL SEARCH INITIATED 15:06:06 FILE 'CASREACT'
SCREENING COMPLETE -    26293 REACTIONS TO VERIFY FROM     1795 DOCUMENTS

100.0% DONE   26293 VERIFIED      25 HIT RXNS                          11 DOCS
SEARCH TIME: 00.00.03

L3            11 SEA SSS FUL L1 (    25 REACTIONS)

=>  d scan

L3   11 ANSWERS   CASREACT  COPYRIGHT 2007 ACS on STN

TI   Synthesis of L-2-spirocyclopropyl-2-deoxyarabinose

RX(50) OF 58 - 6 STEPS
```




```
NOTE: 2) mol. sieve, 4) 56% overall, 6) 90% overall


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3   11 ANSWERS   CASREACT  COPYRIGHT 2007 ACS on STN

TI   Use of high-performance liquid chromatography to control enzymic
     isomerization of glucose

RX(1) OF 1
```

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HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> d l3 1-11 crdref

L3   ANSWER 1 OF 11  CASREACT  COPYRIGHT 2007 ACS on STN
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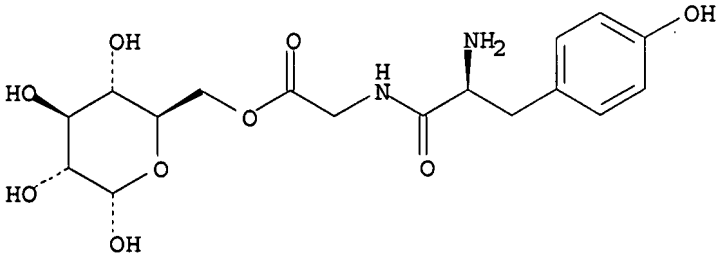
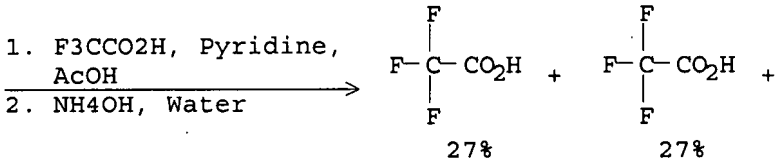
RX(25) OF 50 - 2 STEPS





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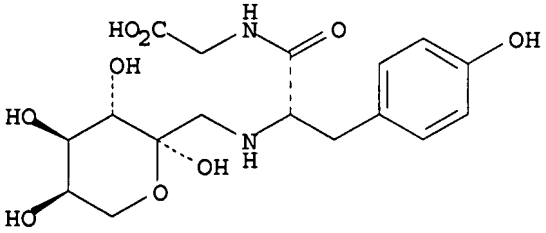
RX(25) OF 50 - 2 STEPS



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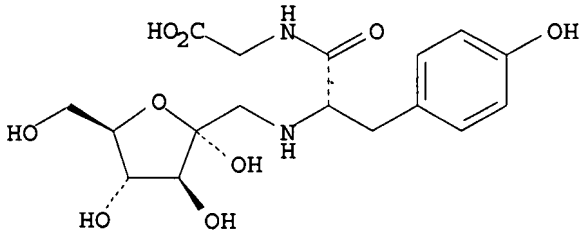
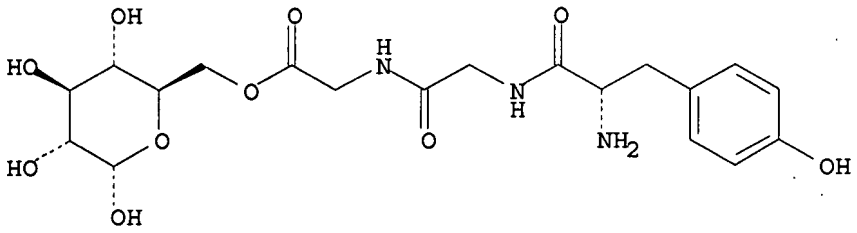


27%

REF: Carbohydrate Research, 339(1), 67-75; 2004

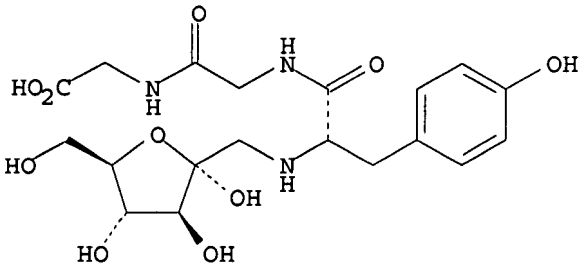
NOTE: 1) stereoselective, Amadori rearrangement, 2) regioselective, anomer ratio alpha-f:beta-f=1:1
CON: STEP(1.1) 17 hours, 37 deg C
STEP(2.1) room temperature; 15 minutes, room temperature

RX(26) OF 50 - 2 STEPS



1. F3CCO2H, Pyridine, AcOH
2. NH4OH, Water

RX(26) OF 50 - 2 STEPS



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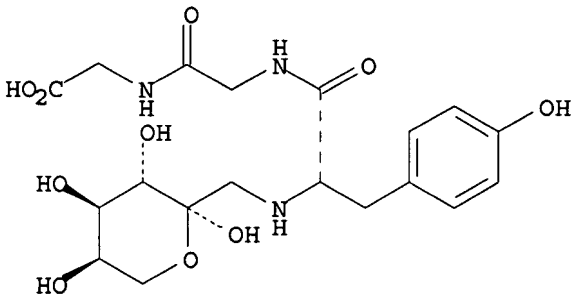
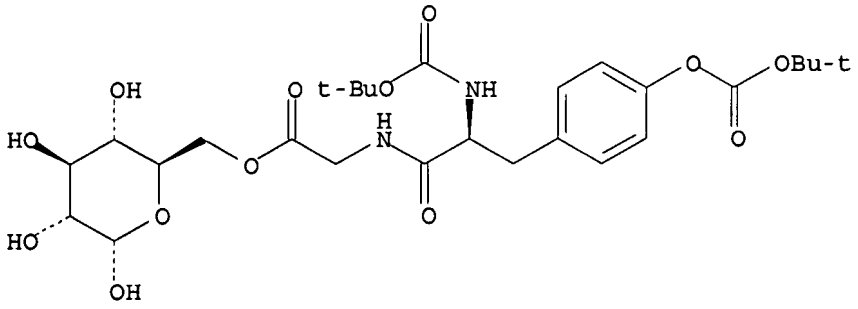
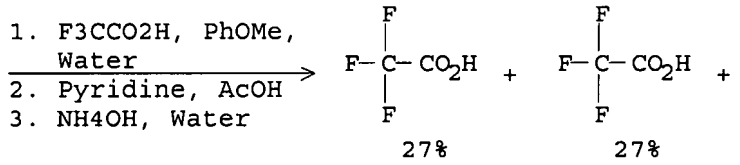


REF: Carbohydrate Research, 339(1), 67-75; 2004

NOTE: 1) stereoselective, Amadori rearrangement, 2) 44% overall yield, anomer ratio beta-p:alpha-f:beta-f=44:42:14
CON: STEP(1.1) 48 hours, room temperature
STEP(2.1) room temperature; 1 hour, room temperature

RX(38) OF 50 - 3 STEPS





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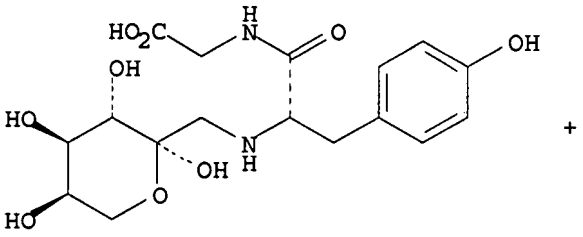
RX(38) OF 50 - 3 STEPS



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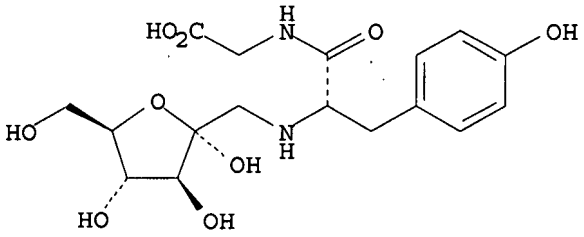


27%

REF: Carbohydrate Research, 339(1), 67-75; 2004

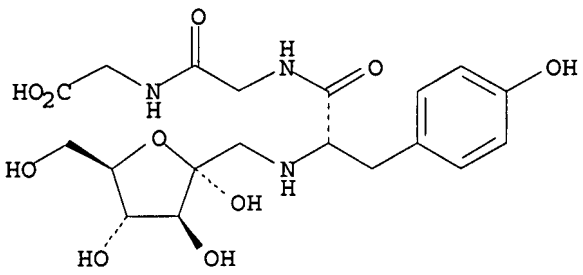
NOTE: 1) anomer ratio alpha-p:beta-p=51:49, 2) stereoselective, Amadori rearrangement, 3) regioselective, anomer ratio alpha-f:beta-f=1:1

CON: STEP(1.1) room temperature; 30 minutes, room temperature
STEP(2.1) 17 hours, 37 deg C
STEP(3.1) room temperature; 15 minutes, room temperature

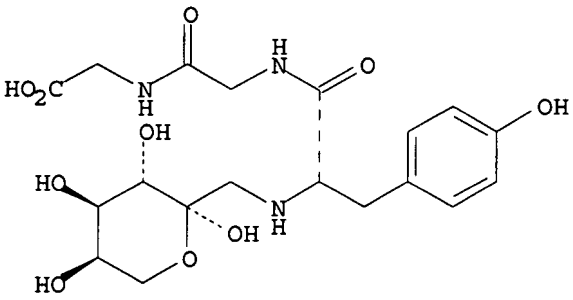
RX(40) OF 50 - 3 STEPS

MULTI
PAGE
IMAGE
663624-70-2

1. F3CCO2H, PhOMe, Water
2. Pyridine, AcOH
3. NH4OH, Water



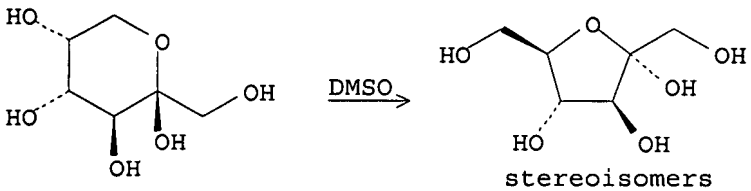
RX(40) OF 50 - 3 STEPS



REF: Carbohydrate Research, 339(1), 67-75; 2004
NOTE: 1) anomer ratio alpha-p:beta-p=55:45, 2) stereoselective, Amadori rearrangement, 3) 44% overall yield, anomer ratio beta-p:alpha-f:beta-f=44:42:14
CON: STEP(1.1) room temperature; 30 minutes, room temperature
STEP(2.1) 48 hours, room temperature
STEP(3.1) room temperature; 1 hour, room temperature

L3 ANSWER 2 OF 11 CASREACT COPYRIGHT 2007 ACS on STN

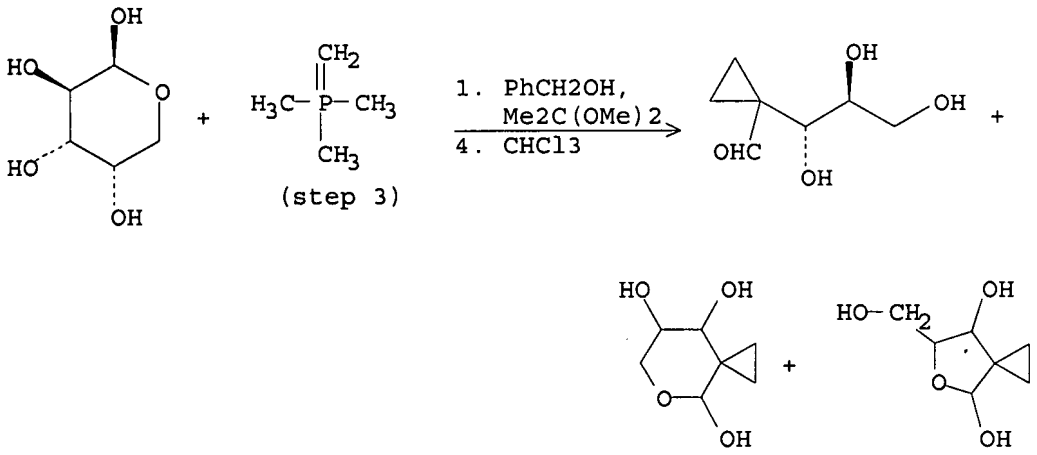
RX(34) OF 176



REF: Carbohydrate Research, 265(2), 249-69; 1994

L3 ANSWER 3 OF 11 CASREACT COPYRIGHT 2007 ACS on STN

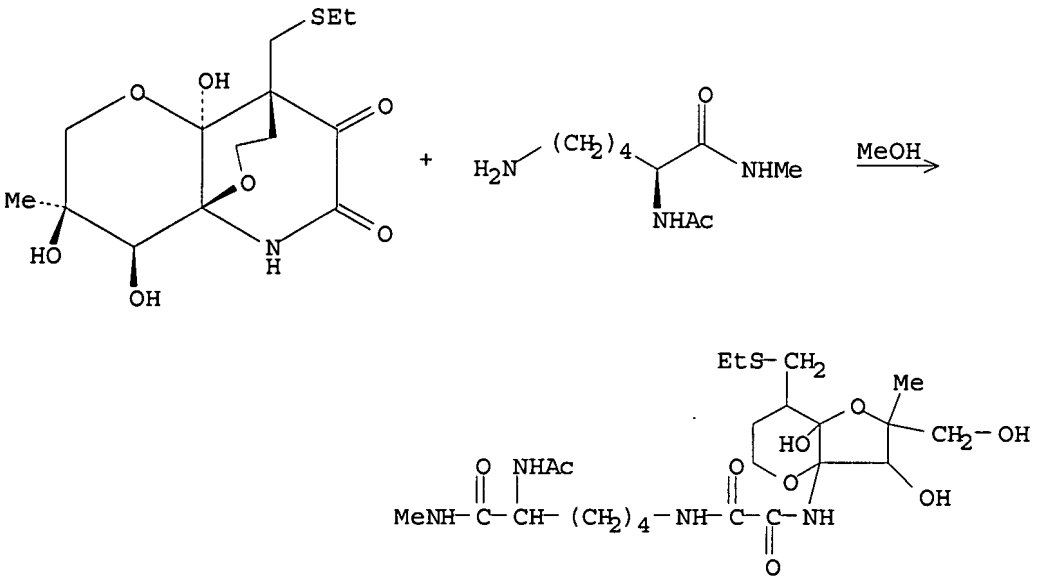
RX(50) OF 58 - 6 STEPS



REF: Tetrahedron Letters, 30(6), 659-62; 1989
NOTE: 2) mol. sieve, 4) 56% overall, 6) 90% overall

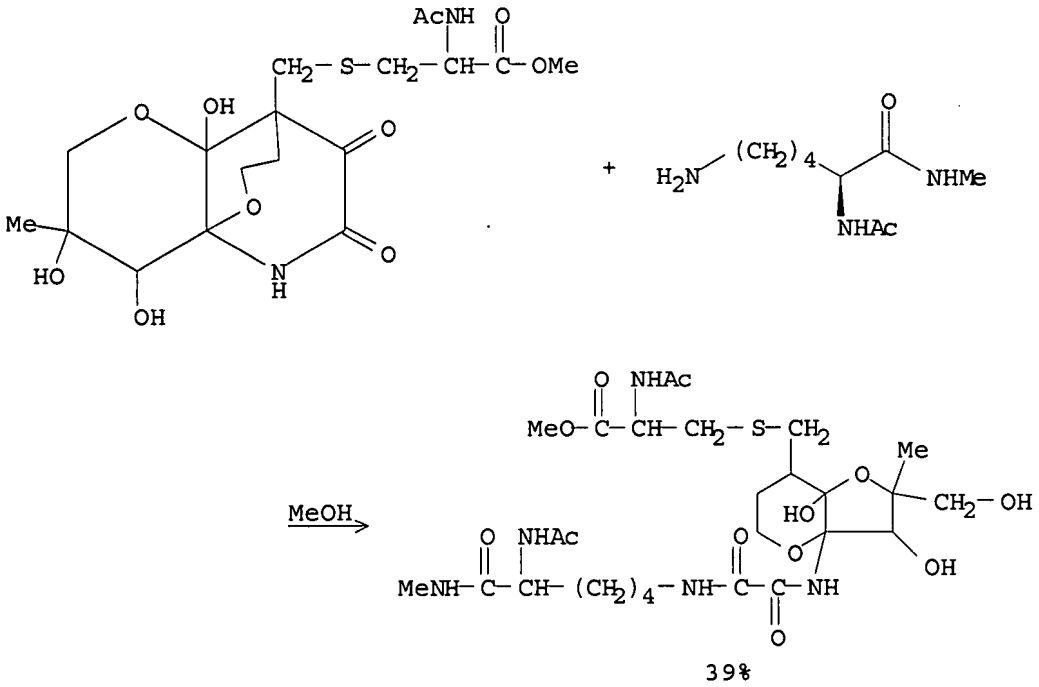
L3 ANSWER 4 OF 11 CASREACT COPYRIGHT 2007 ACS on STN

RX(6) OF 19



REF: Journal of Organic Chemistry, 54(16), 4000-3; 1989

RX(7) OF 19



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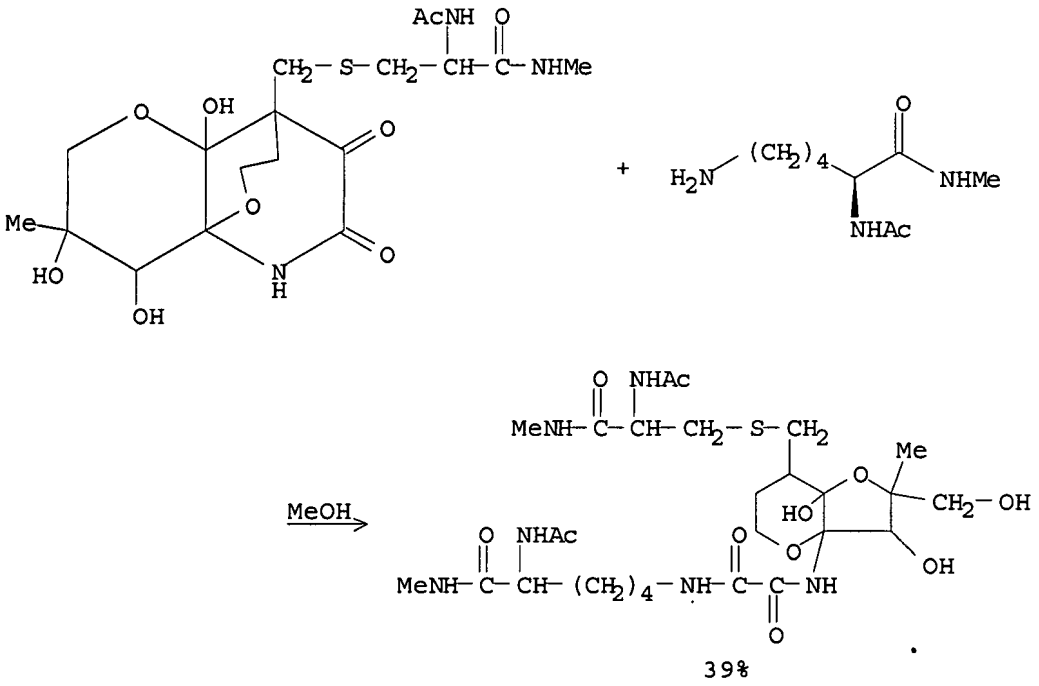
REF: Journal of Organic Chemistry, 54(16), 4000-3; 1989

RX(8) OF 19



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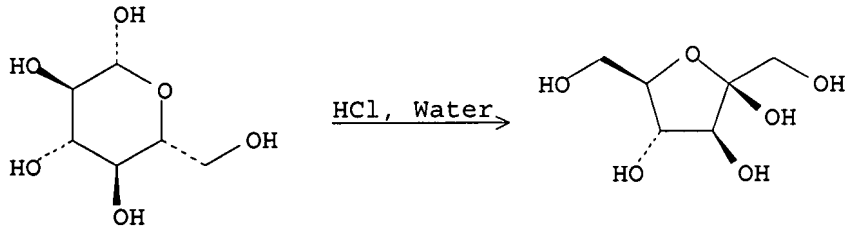
REF: Journal of Organic Chemistry, 54(16), 4000-3; 1989

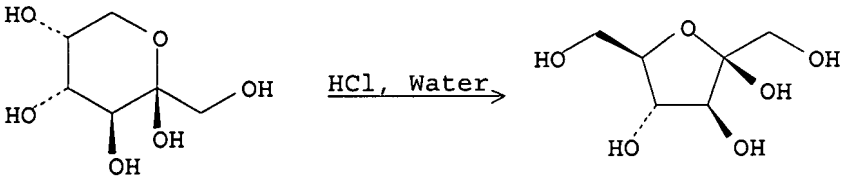
L3 ANSWER 5 OF 11 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 15



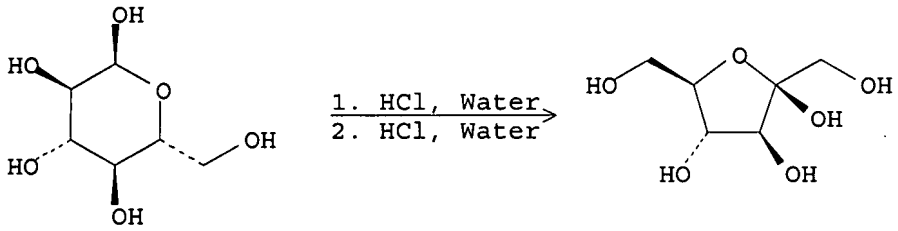
REF: Journal of the American Chemical Society, 110(19), 6372-6; 1988

RX(4) OF 15



REF: Journal of the American Chemical Society, 110(19), 6372-6; 1988

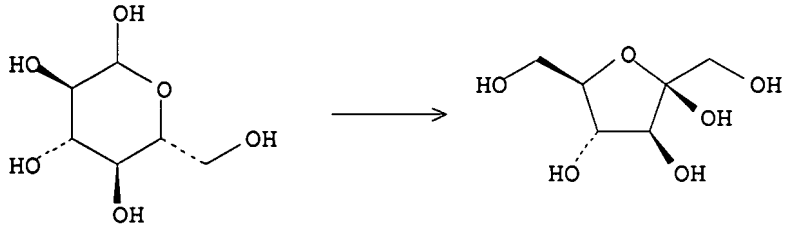
RX(7) OF 15 - 2 STEPS



REF: Journal of the American Chemical Society, 110(19), 6372-6; 1988

L3 ANSWER 6 OF 11 CASREACT COPYRIGHT 2007 ACS on STN

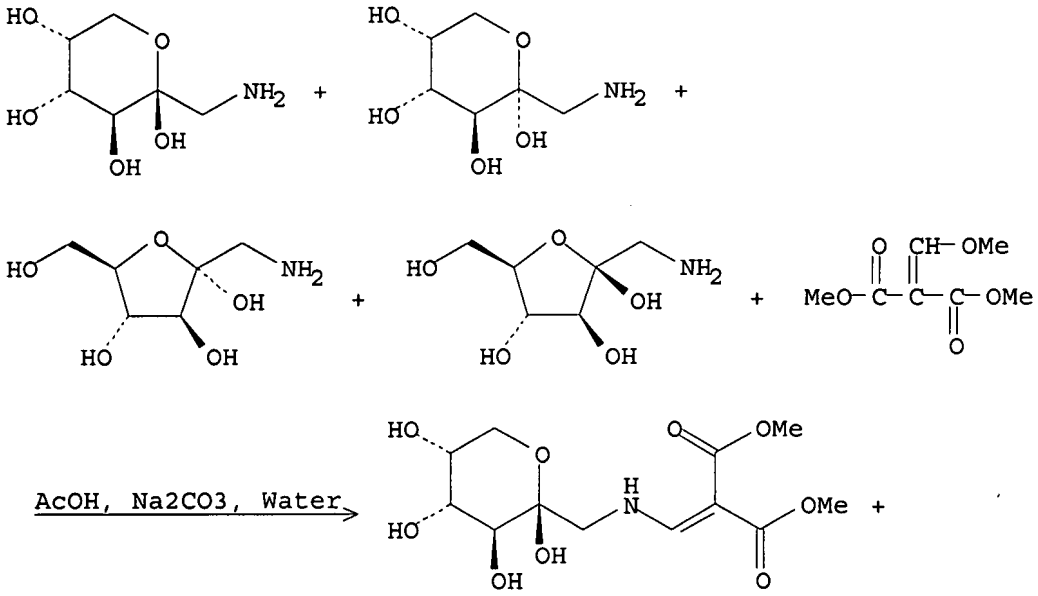
RX(1) OF 1



REF: Vestnik Moskovskogo Universiteta, Seriya 2: Khimiya, 28(6), 542-4; 1987

L3 ANSWER 7 OF 11 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 20



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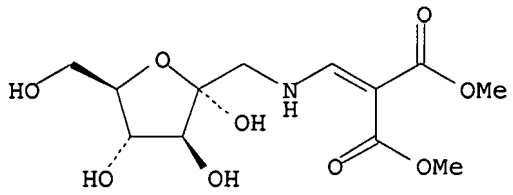
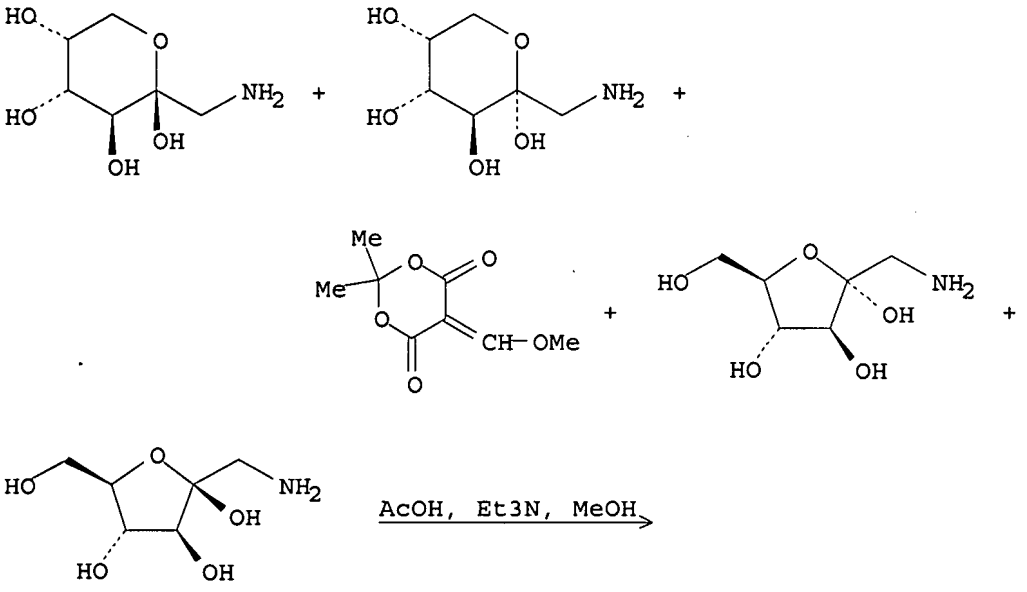


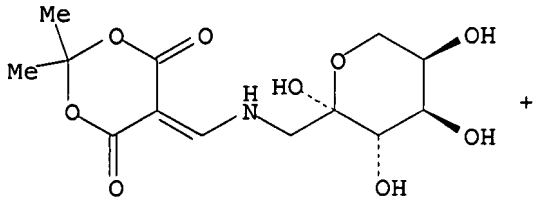
stereoisomers

REF: Carbohydrate Research, 149(2), 329-45; 1986
NOTE: 97% overall

RX(2) OF 20



RX(2) OF 20



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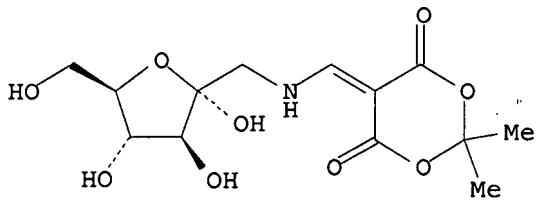
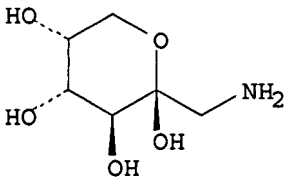


stereoisomers

REF: Carbohydrate Research, 149(2), 329-45; 1986
NOTE: 92% overall

RX(3) OF 20



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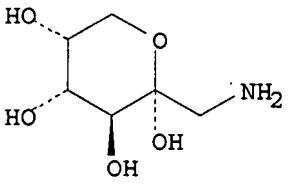

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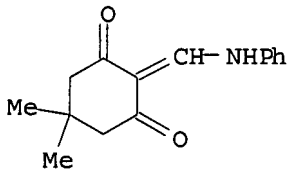

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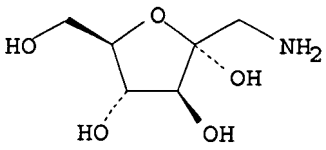

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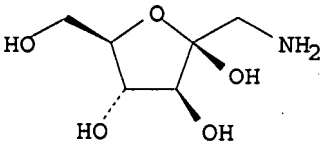
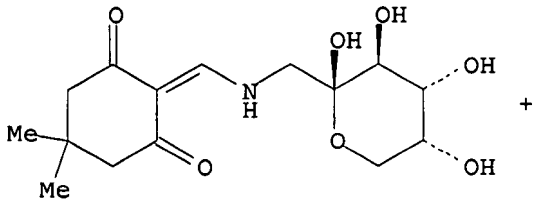


AcOH, Et3N, MeOH

RX(3) OF 20



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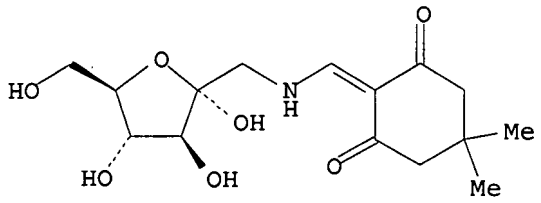
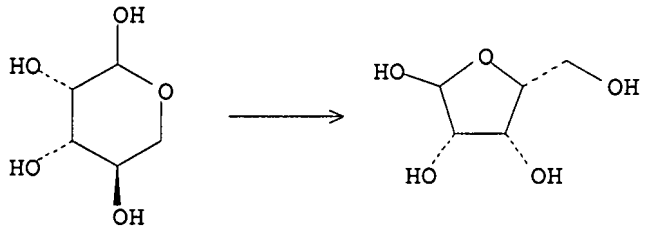


stereoisomers

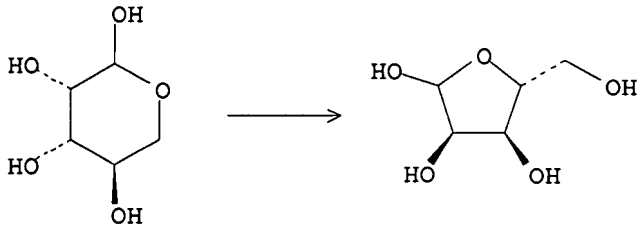
REF: Carbohydrate Research, 149(2), 329-45; 1986
NOTE: 85% overall

L3 ANSWER 8 OF 11 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 3



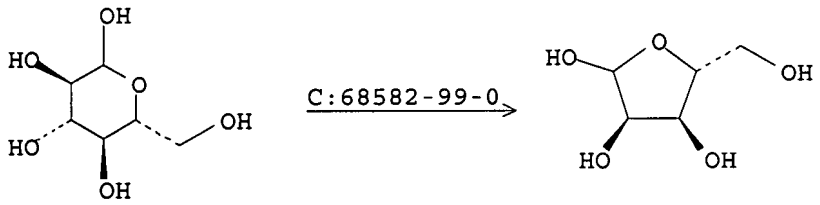
REF: Jpn. Kokai Tokkyo Koho, 60081196, 09 May 1985, Showa
RX(3) OF 3



REF: Jpn. Kokai Tokkyo Koho, 6 pp.; 1985

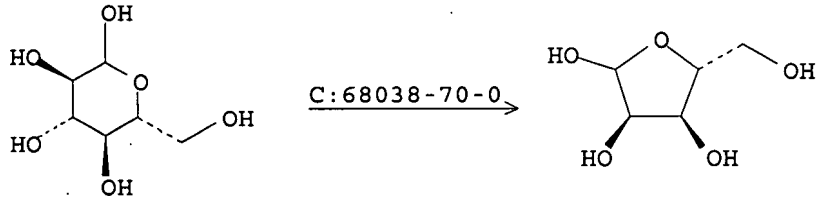
L3 ANSWER 9 OF 11 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 2



REF: Jpn. Kokai Tokkyo Koho, 51079782, 12 Jul 1976, Showa
NOTE: Biotransformation: catalyzed by bacillus pumilus mutant; # Conditions: 15 g educt; growing cells, deficient in transketolase and d-ribulose-5-phosphate-3-epimerase; medium; 60 h, 36.deg.c

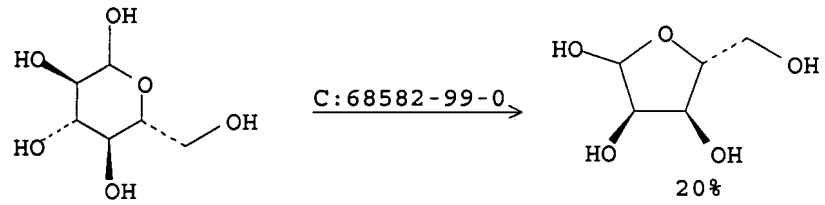
RX(2) OF 2



REF: Jpn. Kokai Tokkyo Koho, 6 pp.; 1976
NOTE: Biotransformation: catalyzed by bacillus subtilis mutant; # Conditions: 15 g educt; growing cells, deficient in transketolase and d-ribulose-5-phosphate-3-epimerase; medium; 60 h, 36.deg.c

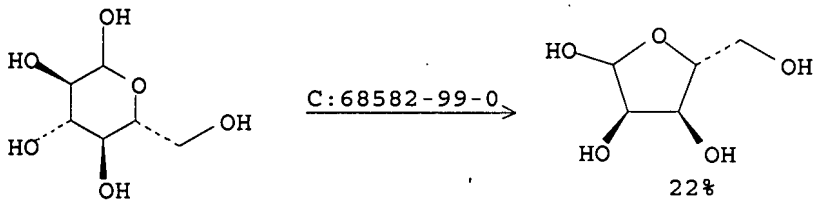
L3 ANSWER 10 OF 11 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 4



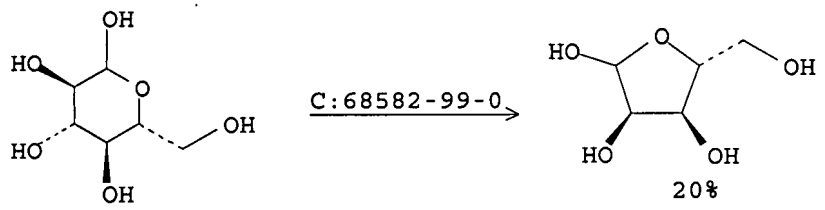
REF: Ger. Offen., 1904265, 02 Oct 1969
NOTE: Biotransformation: catalyzed by bacillus pumilus; # Conditions: 12,5% h; growing cells; 30 l medium; 66h, 32.deg.c

RX(2) OF 4



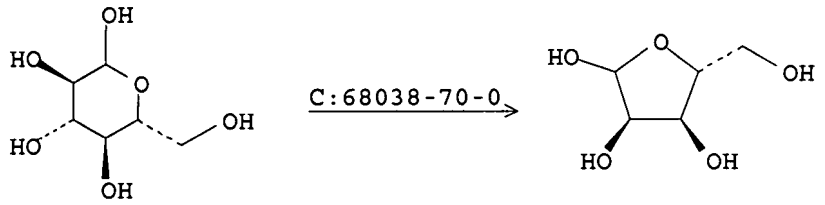
REF: Ger. Offen., 11 pp.; 1969
NOTE: Biotransformation: catalyzed by bacillus pumilus; # Conditions: 12,5% educt; growing cells; 30 l medium; 55h, 37.deg.c

RX(3) OF 4



REF: Ger. Offen., 11 pp.; 1969
NOTE: Biotransformation: catalyzed by bacillus pumilus; # Conditions: 12,5% educt; growing cells; 30 l medium; 80h, 37.deg.cv

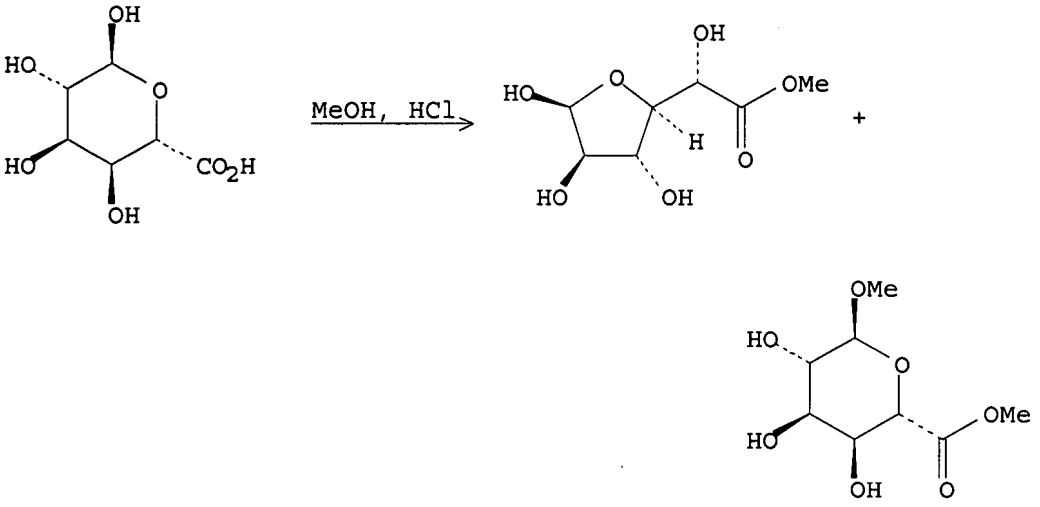
RX(4) OF 4



REF: Ger. Offen., 11 pp.; 1969
NOTE: Biotransformation: catalyzed by bacillus subtilis; # Conditions: 10% educt as soluble starch; growing cells; 30 l medium; 72h, 37.deg.c

L3 ANSWER 11 OF 11 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1



REF: Helvetica Chimica Acta, 47(3), 865-9; 1964
NOTE: Classification: Alkoxylation; Acetalisation; Ring contraction; Diastereoselective; # Conditions: MeOH HCl; Rf 8, 16 and 27h; # Comments: alpha / beta ratio 1/3 for 5-ring product

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	164.11	164.32

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FILE COVERS 1907 - 17 May 2007 VOL 146 ISS 21
FILE LAST UPDATED: 16 May 2007 (20070516/ED)


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=> s 2-deoxy-L-ribose
       9154777 2
         53664 DEOXY
       1564596 L
         27946 RIBOSE
           171 RIBOSES
         28016 RIBOSE
                 (RIBOSE OR RIBOSES)
L4          62 2-DEOXY-L-RIBOSE
                 (2(W)DEOXY(W)L(W)RIBOSE)

=> s l4 and (production or producing or making or synthe? or process or manufact?)
        629073 PRODUCTION
          3537 PRODUCTIONS
        631674 PRODUCTION
                 (PRODUCTION OR PRODUCTIONS)
       1006203 PRODN
           532 PRODNS
       1006385 PRODN
                 (PRODN OR PRODNS)
       1366251 PRODUCTION
                 (PRODUCTION OR PRODN)
        358501 PRODUCING
             4 PRODUCINGS
        358503 PRODUCING
                 (PRODUCING OR PRODUCINGS)
        311582 MAKING
            33 MAKINGS
        311609 MAKING
                 (MAKING OR MAKINGS)
       2186632 SYNTHE?
       2427778 PROCESS
       1650126 PROCESSES
       3621268 PROCESS
                 (PROCESS OR PROCESSES)
        653281 MANUFACT?
       1072804 MANUF
          1558 MANUFS
       1073999 MANUF
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                (MANUF OR MANUFS)
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        201702 MANUFG
       1503898 MANUFACT?
                (MANUFACT? OR MANUF OR MANUFD OR MANUFG)
L5          44 L4 AND (PRODUCTION OR PRODUCING OR MAKING OR SYNTHE? OR PROCESS
               OR MANUFACT?)

=> s l5 and 2-deoxy-D-ribose
       9154777 2
         53664 DEOXY
       2445993 D
         27946 RIBOSE
           171 RIBOSES
         28016 RIBOSE
                (RIBOSE OR RIBOSES)
           771 2-DEOXY-D-RIBOSE
                (2(W)DEOXY(W)D(W)RIBOSE)
L6          12 L5 AND 2-DEOXY-D-RIBOSE

=> dis l6 1-12 bib abs

L6   ANSWER 1 OF 12  CAPLUS  COPYRIGHT 2007 ACS on STN
AN   2006:1135209  CAPLUS
DN   146:62991
TI   A simple and efficient synthesis of 2-deoxy-
     L-ribose from 2-deoxy-D-
     ribose
AU   Ji, Qi; Pang, Meili; Han, Jie; Feng, Suihan; Zhang, Xiaotian; Ma, Yuxin;
     Meng, Jiben
CS   Department of Chemistry, Nankai University, Tianjin, 300071, Peop. Rep.
     China
SO   Synlett (2006), (15), 2498-2500
     CODEN: SYNLES; ISSN: 0936-5214
PB   Georg Thieme Verlag
DT   Journal
LA   English
OS   CASREACT 146:62991
AB   An efficient synthesis of 2-deoxy-L
     -ribose was achieved without chromatog. starting from its
     enantiomer 2-deoxy-D-ribose in
     more than 30% overall yield.  An unexpected product, 2-deoxy-xylose, was
     obtained under slightly different reaction conditions and isolated with
     partial racemization.  The structure of the scalemic 2-deoxy-xylose was
     confirmed by X-ray crystallog.
RE.CNT  26    THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 2 OF 12  CAPLUS  COPYRIGHT 2007 ACS on STN
AN   2006:1079192  CAPLUS
DN   146:38426
TI   Colchicine Glycorandomization Influences Cytotoxicity and Mechanism of
     Action
AU   Ahmed, Aqeel; Peters, Noeel R.; Fitzgerald, Megan K.; Watson, James A.,
     Jr.; Hoffmann, F. Michael; Thorson, Jon S.
CS   Pharmaceutical Sciences Division, School of Pharmacy, University of
     Wisconsin-Madison and Keck-University of Wisconsin Comprehensive Cancer
     Center Small Molecule Screening Facility, Madison, WI, 53705, USA
SO   Journal of the American Chemical Society (2006), 128(44), 14224-14225
     CODEN: JACSAT; ISSN: 0002-7863
PB   American Chemical Society
DT   Journal
LA   English
OS   CASREACT 146:38426
```

AB The reaction of 70 unprotected, diversely functionalized free reducing sugars with methoxyamine-appended colchicine led to the prodn. of a 58-member glycorandomized library. High-throughput cytotoxicity assays revealed glycosylation to modulate specificity and potency. Library members were also identified which, unlike the parent natural product (a destabilizer), stabilized in vitro tubulin polymerization in a manner similar to taxol. This study highlights a simple extension of neoglycorandomization toward amine-bearing scaffolds and the potential benefit of glycosylating nonglycosylated natural products.
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:248366 CAPLUS
DN 142:94050
TI Intrinsic selectivity in some prebiotic reactions of urazole with sugars
AU Kolb, Vera M.; Colloton, Patricia A.
CS Department of Chemistry, Univ. of Wisconsin-Parkside, Kenosha, WI, 53141-2000, USA
SO Proceedings of SPIE-The International Society for Optical Engineering (2004), 5163(Instruments, Methods, and Missions for Astrobiology VII), 48-61
CODEN: PSISDG; ISSN: 0277-786X
PB SPIE-The International Society for Optical Engineering
DT Journal
LA English
OS CASREACT 142:94050
AB Urazole (1,2,4-triazolidine-3,5-dione) (I), 4-methylurazole (II), and its carbon analog, 4,4-dimethylpyrazolidine-3,5-dione (III), react with 2-deoxy-D-ribose (2-deoxy-D-erythro-pentose) in an aqueous solution at room temperature in a regioselective manner (a single substitution on a hydrazidic nitrogen, no reaction on the imide nitrogen) to give a mixture of four nucleosides. These are α and β pyranosides (p) and α and β furanosides (f). The α p forms in a stereoselective manner. A crystalline precipitate is formed in each of the above reactions, which is an exclusive enantiospecific product, 1R, 2R α p. I with 2-deoxy-L-ribose gives a precipitate with the exclusive 1S, 2S α p stereochem. With 2-deoxy-D-glucose (2-deoxy-D-arabino-hexose) the reaction with I is stereospecific, since only one isomer, β p, forms in the solution Causes of enhanced reactivity of I with sugars were also studied. It was found that cyclic hydrazide analogs of I, such as II and III, are reactive, but open-chain analogs, 1,2,-diacetylhydrazine and 1,2-dicarbethoxyhydrazine, are not. Although this reactivity assessment was done qual. and under restrictive reaction conditions, it still may be valuable for understanding α -effect of hydrazide nucleophiles. The prebiotic significance of our results is discussed.
RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:229701 CAPLUS
DN 140:217948
TI Synthesis of D- and L-deoxyribose
IN Hu, Shougang; Wu, Yulin
PA Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 19 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1349999	A	20020522	CN 2001-132068	20011030
PRAI	CN 2001-132068		20011030		

OS CASREACT 140:217948; MARPAT 140:217948

AB The process comprises etherifying D- or L-α-propynyl-2,2-dimethyl-1,3-dioxolane-4-methanol with dihydrofuran or R1Z (R1 = R2R3R4Si, benzyl, benzoyl, benzoyloxy, acetyl, acetoxy, methoxymethyl, or benzyloxymethyl; Z = X, trifluoromethylsulfonyl, benzoyl, acetyl, or methoxy; and R2, R3, and/or r4 = C1- 6 alkyl) in the presence of amine or NaH (at a molar ratio of 1:1-5:0-100) at (-78)°-reflux temperature for 0.5-50 h to obtain D- or L-4-(1-R-3-butynyl)-2,2-dimethyl-1,3-dioxolane; hydrogenating in the presence of Lindlar catalyst (such as Pd/BaSO4/Pd(OAc)2 or Pd/CaCO3/Pd(OAc)2) at room temperature-reflux temperature for 10 min-50 h to obtain D- or L-4-(1-RO-3-butenyl)-2,2-dimethyl-1,3-dioxolane; fragmentating with O3 then with Me2S at (-78)°-reflux temperature for 1-48 h, and then hydrolyzing (or reducing with reductant in the presence of catalyst such as 10% Pd/C, Raney Ni, etc. with R = benzyl) and cyclizing with acid in water or organic solvent at room temperature-reflux temperature for 1-48 h.

L6 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:60523 CAPLUS

DN 140:94225

TI Method for producing 2-deoxy-L-ribose from 2-deoxy-D-ribose

IN Kang, Jae-Sung; Yun, Mi-Hong; Lee, Sang-Dae; Jeon, Byoung-Chan; Shin, Jeong-Ah

PA Samchully Pharm. Co., Ltd., S. Korea

SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004007513	A1	20040122	WO 2003-KR1398	20030715
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	KR 2004006826	A	20040124	KR 2002-41378	20020715
	CA 2492558	A1	20040122	CA 2003-2492558	20030715
	AU 2003281047	A1	20040202	AU 2003-281047	20030715
	EP 1556396	A1	20050727	EP 2003-741579	20030715
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2005176950	A1	20050811	US 2003-521022	20030715
	CN 1668626	A	20050914	CN 2003-816606	20030715
	JP 2005538080	T	20051215	JP 2004-521271	20030715
	IN 2005KN00186	A	20051104	IN 2005-KN186	20050214
PRAI	KR 2002-41378	A	20020715		
	WO 2003-KR1398	W	20030715		

OS CASREACT 140:94225; MARPAT 140:94225

AB The present invention relates to a economic synthetic method of 2-deoxy-L-ribose from 2-

deoxy-D-ribose with easy reaction, separation and purification The present invention consists of four steps including protection, activation 3-and 4-OH groups, inversion and deprotection step. In respect to the cost for equipment, reagent and operation, by the present invention, 2-deoxy-L-ribose can be produced more economically because the invention uses 2-deoxy-L-ribose which is abundant in nature and easily synthesized from D-glucose, and adopt simple and yielding process.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:879195 CAPLUS
DN 138:205255
TI A concise approach to the synthesis of L- and D-deoxyribose
AU Hu, Shou-Gang; Wu, Yi-Kang; Wu, Yu-Lin
CS State Key Laboratory of Bioorganic and Natural Products Chemistry Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep. China
SO Chinese Journal of Chemistry (2002), 20(11), 1358-1362
CODEN: CJOCEV; ISSN: 1001-604X
PB Science Press
DT Journal
LA English
OS CASREACT 138:205255
AB D-Deoxyribose, the basic structure unit of DNA, and its antipode L-deoxyribose were concisely synthesized from easily available D- and L-glyceralaldehydes using a known convenient diastereoselective propargylation as the key step.

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:886551 CAPLUS
DN 136:34273
TI Immobilized spiegelmer nucleic acids and their usage as affinity ligands
IN Burmeister, Jens; Burgstaller, Petra; Klussmann, Sven; Klein, Thomas; Frauendorf, Christian
PA Noxxon Pharma A.-G., Germany
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001092566	A2	20011206	WO 2001-EP6014	20010525
	WO 2001092566	A3	20020919		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2001069039	A5	20011211	AU 2001-69039	20010525
	EP 1283881	A2	20030219	EP 2001-947321	20010525
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2005208487	A1	20050922	US 2003-296506	20030521
PRAI	DE 2000-10026300	A	20000526		

WO 2001-EP6014 W 20010525

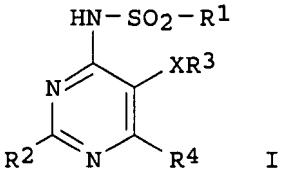
AB The invention relates to the immobilization of spiegelmer (mirror-image) nucleic acids onto a matrix. The spiegelmer nucleic acids are functionally active. Functionalized nucleic acids are coupled to the matrix via their 3' end. The invention further relates to the use of the immobilized nucleic acids as affinity ligands in chromatog., apheresis, and for sensors. Thus amino-modified and 32P-labeled DNA was synthesized and immobilized onto Eupergit; the conjugation was checked by radiochem. anal. Tritium-labeled GnRH peptide was synthesized and the binding on the labeled matrix was evaluated.

L6 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:798218 CAPLUS
DN 135:331440
TI Preparation of substituted sulfonylaminopyrimidines as endothelin receptor antagonists
IN Boss, Christoph; Bolli, Martin; Clozel, Martine; Fischli, Walter; Weller, Thomas
PA Actelion Pharmaceuticals Ltd., Switz.
SO PCT Int. Appl., 124 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001081338	A1	20011101	WO 2001-EP4133	20010411

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI WO 2000-EP3692 W 20000425
OS MARPAT 135:331440
GI



I

AB The present invention relates to novel substituted pyrimidines I (e.g. rac-5-isopropyl-N-[5-(2-methoxyphenoxy)-2-(4-pyridyl)-6-(tetrahydrofuran-2-ylmethoxy)-4-pyrimidinyl]-2-pyridinesulfonamide) and pharmaceutically acceptable salts thereof and their use as active ingredients in the preparation of pharmaceutical compns. The invention also concerns related aspects including processes for the preparation of the compds., pharmaceutical compns. containing one or more I and especially their use as endothelin receptor antagonists. In I: R1 = aryl; aryl-lower alkyl; aryl-lower alkenyl; heteroaryl; heteroaryl-lower alkyl. R2 = H; halogen; trifluoromethyl; lower alkyl; lower alkylamino; lower alkyloxy; lower alkylsulfono; lower alkylsulfinyl; lower alkylthio; lower alkylthio-lower alkyl; hydroxy-lower alkyl; hydroxy-lower alkyloxy; lower alkyloxy-lower alkyl; lower alkyloxy-lower alkyloxy; hydroxy-lower alkyloxy-lower alkyl; hydroxy-lower alkyloxy-lower alkyloxy; lower alkyloxy-lower alkyloxy-lower

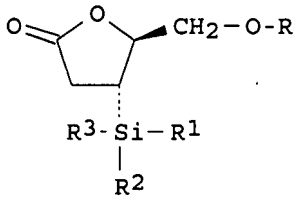
alkyloxy; hydroxy-lower alkylamino; lower alkylamino-lower alkyl; amino; di-lower alkylamino; [N-(hydroxy-lower alkyl)-N-(lower alkyl)]amino; aryl; arylamino; aryl-lower alkylamino; arylthio; aryl-lower alkylthio; aryloxy. Also, R2 = aryl-lower alkyloxy; aryl-lower alkyl; arylsulfinyl; heteroaryl; heteroaryloxy; heteroaryl-lower alkyloxy; heteroarylamino; heteroaryl-lower alkylamino; heteroaryl-lower alkylthio; heteroaryl-lower alkyl; heteroarylsulfinyl; heterocyclyl; heterocyclyl-lower alkyloxy; heterocyclyloxy; heterocyclylamino; heterocyclyl-lower alkylamino; heterocyclylthio; heterocyclyl-lower alkylthio; heterocyclyl-lower alkyl; heterocyclylsulfinyl; cycloalkyl; cycloalkyloxy; cycloalkyl-lower alkyloxy; cycloalkylamino; cycloalkyl-lower alkylamino; cycloalkylthio; cycloalkyl-lower alkyl; cycloalkylsulfinyl; alkyloxycarbonyl; carboxy; cycloalkyl-lower alkylthio; cyano; aminocarbonyl. R3 = phenyl; mono, di- or trisubstituted Ph substituted with lower alkyl, lower alkenyl, lower alkyloxy, amino, lower alkylamino, amino-lower alkyl, trifluoromethyl, trifluoromethoxy, halogen, lower alkylthio, hydroxy, hydroxy-lower alkyl, cyano, carboxy, alkoxycarbonyl, lower alkanoyl, formyl; benzofuranyl; aryl; heteroaryl. X = O; S; NH; CH2 or a bond; R4 = N(CH2)2Z(CH2)2 (Z = = O, imino, S, SO, or SO2) and substituted alkoxy as specified in the claims. Ninety-two example prepns. are included, but the methods of preparation are not claimed. IC50 (concentration of antagonist inhibiting 50% of the specific binding of ET-1) values were determined for some of the claimed compds. and were as low as 6 nM (rac-5-methylpyridine-2-sulfonic acid [5-(2-methoxyphenoxy)-6-(tetrahydrofuran-2-ylmethoxy)-2-[2-(5-thioxo-4,5-dihydro-[1,2,4]oxadiazol-3-yl)pyridin-4-yl]pyrimidin-4-yl]amide). Also, pA2 (neg. value of logarithm of antagonist concentration that induces 2-fold shift in concentration of endothelin needed to get half-maximal contraction on isolated rat aortic rings or rat tracheal rings) are reported for 5 I.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:795034 CAPLUS
DN 135:331636
TI Preparation of D- or L-2-deoxy-ribo-lactones or aldoses
IN Schneider, Manfred; Fazio, Fabio
PA Germany
SO Ger. Offen., 12 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10020275	A1	20011031	DE 2000-10020275	20000425

PRAI DE 2000-10020275 20000425
OS CASREACT 135:331636; MARPAT 135:331636
GI



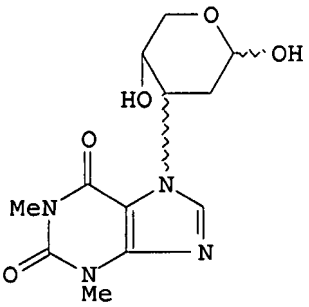
I

AB Preparation of title compds. [(I); R = H, (substituted)alkyl, (substituted) aryl, (substituted) benzyl, sugar protecting group or activating group; R1-R3 = (substituted)(cyclo)alkyl, (substituted)aryl], and their open

aldose forms, potentially useful for the synthesis of natural or unnatural D- or L-nucleic acids (no data), was claimed. Thus, beginning from R-5-hydroxymethyl-5H-furan-2-one, 2-deoxy-D-ribose was prepared in 5 steps, by 5-O-protection, regio- and stereoselective silylation, silyl-hydroxy exchange, ring-opening reduction, and deprotection.

L6 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:51310 CAPLUS
DN 128:241079
TI Inhibitory potency of R-region specific antisense oligonucleotides against in vitro DNA polymerization and template-switching reactions catalyzed by HIV-1 reverse transcriptase
AU Borkow, Gadi; Arion, Dominique; Noronha, Anne; Scartozzi, Margherita; Damha, Masad J.; Parniak, Michael A.
CS Lady Davis Institute for Medical Research and McGill University AIDS Centre, SMBD-Jewish General Hospital, Montreal, QC, H3T 1E2, Can.
SO International Journal of Biochemistry & Cell Biology (1997), 29(11), 1285-1295
CODEN: IJBBFU; ISSN: 1357-2725
PB Elsevier Science Ltd.
DT Journal
LA English
AB Antisense oligonucleotides (AONs) targeted to the R-region near the 5'-LTR of HIV-1 genomic RNA inhibited both the synthesis of (-) strong stop DNA and the first template-switch reaction catalyzed by HIV-1 reverse transcriptase (RT) in vitro. The 18 nucleotide (nt) AONs used were identical in sequence but differed in the sugar component of the 3'-terminal nucleotide, with either 2'-deoxy-D-ribose (DNA), 2'-deoxy-L-ribose (L), or arabinose (ARA) in this position. All three AONs hybridized to complementary 18 nt RNA (Tm≈70°C) and specifically interacted with the target RNA HIV-1 sequence at 37°C. L was unable to serve as primer for RT-catalyzed DNA polymerization, whereas priming from ARA was about 30% that noted with DNA. Each of the three AONs resulted in similar 85-95% decreases in the amount of full length (-) strong stop DNA and up to 75% decreases in the first template-switch reaction products formed by RT, implying that elongation of the AONs did not enhance the inhibitory activity in vitro. A concomitant increase in a truncated DNA product corresponding to polymerization termination at the 5'-end of the AON was noted, indicating that RT was unable to displace the AON. Interestingly, near maximal inhibition in vitro an AON:target RNA template ratio of 1:1 was noted. Our results confirm the validity of our in vitro system for the anal. of potential antisense oligonucleotide inhibitors, and suggest that antisense oligonucleotides directed to the R-region of HIV-1 RNA may be effective inhibitors of the initial stages of HIV-1 proviral DNA synthesis.

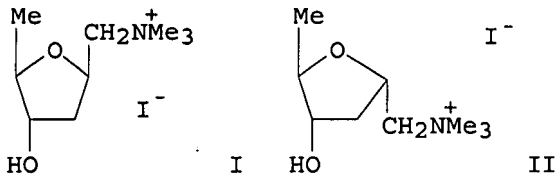
L6 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:154771 CAPLUS
DN 110:154771
TI Anomalously coupled nucleosides. IV. Synthesis of 2,3-dideoxy-3-(7-theophyllyl)-D-pentopyranoses
AU Andersen, Lene; Lau, Jesper; Pedersen, Erik B.
CS Dep. Chem., Odense Univ., Odense, DK-5230, Den.
SO Chemica Scripta (1988), 28(3), 307-9
CODEN: CSRPB9; ISSN: 0004-2056
DT Journal
LA English
OS CASREACT 110:154771
GI



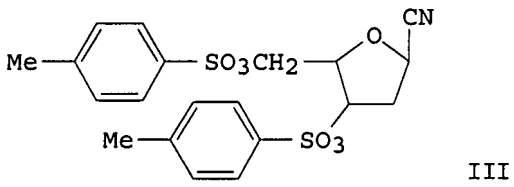
I

AB Threo and erythro isomers of 2,3-dideoxy-3-(7-theophyllyl)-D-pentopyranoses (I) were prepared from theophylline and 2-deoxy-D-ribose by coupling in a mixture of phosphorus pentoxide, tributylamine, and trichloromethane. The structures were determined by 13C-NMR, 1H-NMR, and mass spectrometry.

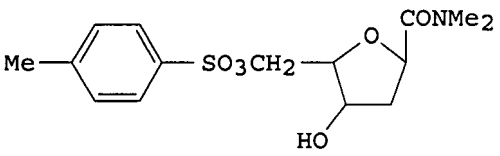
L6 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1982:69258 CAPLUS
DN 96:69258
TI Stereospecific synthesis of muscarines and allomuscarines in D- and L-series
AU Pochet, Sylvie; Huynh Dinh Tam
CS Dep. Biochim. Genet. Mol., CNRS, Paris, 75724, Fr.
SO Journal of Organic Chemistry (1982), 47(2), 193-8
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
GI



I II



III



IV

AB D-(-)-(1R,3S,4R)-Muscarine iodide (I) and L-(+)-(1S,3S,4R)-allomuscarine iodide (II) were synthesized from 2-deoxy-D-ribose. Treatment of the β-cyanide III with a methanolic HCl solution gave a mixture of Me esters. These esters reacted with Me2NH at 90°C to yield the corresponding deprotected dimethylamide

IV. Selective tosylation of IV in dry pyridine and reduction of the resulting tosyl amide with LiAlH4 in refluxing THF, followed by quaternization with Me iodide gave I. The same procedure with the α-cyanide gave II. L-(+)-(1S,3R,4S)-Muscarine iodide and D-(-)-(1R,3R,4S)-allomuscarine iodide were analogously prepared from 2-deoxy-L -ribose. The anomeric purity of these compds. was determined by spectroscopy.

=> dis l5 1-44 bib abs

L5 ANSWER 1 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:1240711 CAPLUS
DN 146:317149
TI Preparation method for 1-methoxy-2-deoxy-L-ribose without purification process for improving preparation yield and reducing production costs
IN Kang, Jae Sung; Kim, Kyung Il; Yun, Mi Hong; Yu, Gi Weon; Chang, Sun Ki; Kim, Min Kyu; Yi, Jeong Wu; Lee, Kwang Kuk
PA Samchully Pharm. Co., Ltd., S. Korea
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DT Patent
LA Korean
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI KR 2006072554	A	20060628	KR 2004-111227	20041223
PRAI KR 2004-111227		20041223		

AB A preparation method of 1-methoxy-2-deoxy-L-ribose is claimed. Said method serves to continuously and cheaply prepare the compound without a purification process, improve preparation yield by avoiding the prodn. of byproducts, and simplify the preparation procedures. The preparation method of 1-methoxy-2-deoxy-L-ribose (as represented by a certain formula; no data) comprises the reaction of suitable reactants with vinyl metals to provide products (no data). Said method also comprises the reaction of suitable reactant material with ozone to provide products which are treated with acid and methanol (no data). Substituent groups may be selected from H, C1-15 alkyl, C3-15 cycloalkyl, Ph, etc. (incomplete list). Vinyl metal is vinyl lithium or lithium divinyl. More narrow definitions are indicated; however, specific chemical structures and/or addnl. information are not provided here.

L5 ANSWER 2 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:1135209 CAPLUS
DN 146:62991
TI A simple and efficient synthesis of 2-deoxy-L-ribose from 2-deoxy-D-ribose
AU Ji, Qi; Pang, Meili; Han, Jie; Feng, Suihan; Zhang, Xiaotian; Ma, Yuxin; Meng, Jiben
CS Department of Chemistry, Nankai University, Tianjin, 300071, Peop. Rep. China
SO Synlett (2006), (15), 2498-2500
CODEN: SYNLES; ISSN: 0936-5214
PB Georg Thieme Verlag
DT Journal
LA English
OS CASREACT 146:62991
AB An efficient synthesis of 2-deoxy-L -ribose was achieved without chromatog. starting from its enantiomer 2-deoxy-D-ribose in more than 30% overall yield. An unexpected product, 2-deoxy-xylose, was obtained under slightly different reaction conditions and isolated with partial racemization. The structure of the

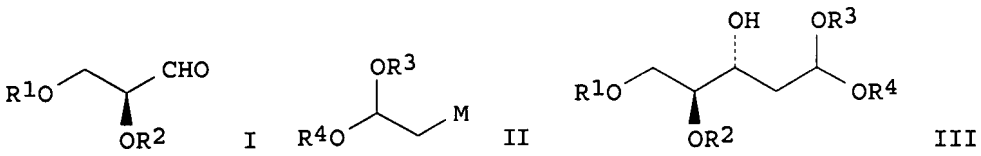
scalemic 2-deoxy-xylose was confirmed by X-ray crystallog.
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:1079192 CAPLUS
DN 146:38426
TI Colchicine Glycorandomization Influences Cytotoxicity and Mechanism of Action
AU Ahmed, Aqeel; Peters, Noeel R.; Fitzgerald, Megan K.; Watson, James A., Jr.; Hoffmann, F. Michael; Thorson, Jon S.
CS Pharmaceutical Sciences Division, School of Pharmacy, University of Wisconsin-Madison and Keck-University of Wisconsin Comprehensive Cancer Center Small Molecule Screening Facility, Madison, WI, 53705, USA
SO Journal of the American Chemical Society (2006), 128(44), 14224-14225
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
OS CASREACT 146:38426
AB The reaction of 70 unprotected, diversely functionalized free reducing sugars with methoxyamine-appended colchicine led to the prodn. of a 58-member glycorandomized library. High-throughput cytotoxicity assays revealed glycosylation to modulate specificity and potency. Library members were also identified which, unlike the parent natural product (a destabilizer), stabilized in vitro tubulin polymerization in a manner similar to taxol. This study highlights a simple extension of neoglycorandomization toward amine-bearing scaffolds and the potential benefit of glycosylating nonglycosylated natural products.
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:998723 CAPLUS
DN 143:248613
TI Production method of 2-deoxy-L-ribose via coupling of glyceraldehyde with organo-metallic compound and acid hydrolysis dehydration
IN Oka, Sachiko; Honda, Yutaka; Izawa, Kunisuke
PA Ajinomoto Co., Inc., Japan
SO Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1574515	A2	20050914	EP 2005-5276	20050310
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
JP 2005289964	A	20051020	JP 2004-272619	20040917
US 2005228175	A1	20051013	US 2005-76877	20050311
PRAI JP 2004-71101	A	20040312		
JP 2004-272619	A	20040917		
US 2004-574216P	P	20040526		

OS CASREACT 143:248613; MARPAT 143:248613
GI



AB An aldehyde compound represented by the formula I, wherein R1 and R2 are independently hydroxy-protecting group reacted with an organo-metallic compound II, wherein R3 and R4 are each independently an alkyl group, an aralkyl group, an aryl group or a silyl group or R3 and R4 in combination show a cyclic alkyl group, and M is a metal atom or a metal salt, to give an alc. compound represented by the formula III, wherein R1-R4 are as defined above, which is then subjected to deprotection of a hydroxyl group and prodn. of aldehyde by acid hydrolysis. Thus, coupling of 2,3-O-isopropylidene-L-glyceraldehyde with (1,3-dioxolan-2-ylmethyl)magnesium bromide gave 2-deoxy-4,5-O-isopropylidene-L-ribose ethylene acetal in 71% yield. Acid hydrolysis dehydration of 2-deoxy-4,5-O-isopropylidene-L-ribose ethylene acetal gave 2-deoxy-L-ribose in 92% yield.

L5 ANSWER 5 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:413559 CAPLUS
DN 143:387248
TI Review on the synthetic methods of 2-deoxy-L-ribose
AU Han, Su-Hui; Qu, Gui-Rong; Li, Yong
CS College of Chemical & Environmental Science, Henan Normal University, Xinxiang, 453007, Peop. Rep. China
SO Youji Huaxue (2005), 25(5), 526-531
CODEN: YCHHDX; ISSN: 0253-2786
PB Youji Huaxue Bianjibu
DT Journal; General Review
LA Chinese
AB A review with refs. on the methods for synthesis of 2-deoxy-L-ribose was presented. The authors reviewed synthetic methods of 2-deoxy-L-ribose were reviewed as follows:(1) reductive deoxygenation of pentose;(2) degradative deoxygenation of hexose; (3) diastereoselective addition of α,β-unsatd. lactone; (4) stereoselective condensation of small mols.; (5) asym. epoxidn. and the mechanism of reductive deoxygenation of pentose and the modified procedure were discussed in detail.

L5 ANSWER 6 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:316566 CAPLUS
DN 143:44007
TI A new efficient and practical synthesis of 2-deoxy-L-ribose
AU Cho, Bong Hwan; Kim, Jin Hwan; Jeon, Heung Bae; Kim, Kwan Soo
CS Department of Chemistry, Center for Bioactive Molecular Hybrids, Yonsei University, Seoul, 120-749, S. Korea
SO Tetrahedron (2005), 61(18), 4341-4346
CODEN: TETRAB; ISSN: 0040-4020
PB Elsevier B.V.
DT Journal
LA English
OS CASREACT 143:44007
AB An efficient and practical route for large-scale synthesis of 2-deoxy-L-ribose starting from L-ascorbic acid via epoxide ring cleavage was developed in eight steps without chromatog. purification for all intermediates. Addnl., (2S,3R)-3,4-epoxy-1,2-O-isopropylidene-butane-1,2-diol, a versatile

intermediate in carbohydrate synthesis, was also prepared readily in excellent yield as a key intermediate.

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:978369 CAPLUS
DN 142:155333
TI Process for preparing 2-deoxy-L-ribose from D-arabinose
IN Jun, Byeong Chan; Kang, Jae Seong; Lee, Sang Dae; Shin, Jeong A.; Yoon, Mi Hong
PA Samchully Pharm. Co., Ltd., S. Korea
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DT Patent
LA Korean
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI KR 2003038220	A	20030516	KR 2001-69915	20011110
PRAI KR 2001-69915		20011110		

AB A process for preparing 2-deoxy-L-ribose from D-arabinose is provided, therefore 2-deoxy-L-ribose can be cheaply mass-prepared by using cheap reagents having less toxicity under mild conditions. A process for preparing 2-deoxy-L-ribose of the formula(1) from D-arabinose comprises the steps of: forming epoxide rings at 2, 3-sites of D-arabinose to prepare an epoxy compound; reducing the epoxy ring compound to prepare a 2-deoxy compound; and inversion of the spatial structure of 4-OH in the 2-deoxy compound to prepare a L-type compound

L5 ANSWER 8 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:978362 CAPLUS
DN 142:155332
TI Process for preparing 2-deoxy-L-ribose
IN Jang, Sun Gi; Kang, Jae Seong; Kim, Min Gyu; Lee, Ji Yeong; Lee, Yeong Jae; Park, Yeong Won; Yoo, Gi Won; Yoon, Mi Hong
PA Samchully Pharm. Co., Ltd., S. Korea
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DT Patent
LA Korean
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI KR 2003038043	A	20030516	KR 2001-69451	20011108
PRAI KR 2001-69451		20011108		

AB A process for preparing 2-deoxy-L-ribose is provided, thereby simply and cheaply preparing 2-deoxy-L-ribose in higher yield without side-products. A process for preparing 2-deoxy-L-ribose represented by formula (IV) comprises the steps of: (a) reacting a compound of formula (II) with ozone to prepare a compound of formula (III); and (b) deprotection of the compound of formula (III) to prepare a compound of formula (IV), wherein R1 and R2 are independently H, C1-15 alkyl, C3-15 cycloalkyl or phenyl; and R3 and R4 are independently H, C1-15 alkyl, C3-C15 cycloalkyl or Ph, and R3 and R4 may form 5-, 6-, 7- or 8-membered ring and one or more substituents.

L5 ANSWER 9 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:248366 CAPLUS

DN 142:94050
TI Intrinsic selectivity in some prebiotic reactions of urazole with sugars
AU Kolb, Vera M.; Colloton, Patricia A.
CS Department of Chemistry, Univ. of Wisconsin-Parkside, Kenosha, WI, 53141-2000, USA
SO Proceedings of SPIE-The International Society for Optical Engineering (2004), 5163(Instruments, Methods, and Missions for Astrobiology VII), 48-61
CODEN: PSISDG; ISSN: 0277-786X
PB SPIE-The International Society for Optical Engineering
DT Journal
LA English
OS CASREACT 142:94050
AB Urazole (1,2,4-triazolidine-3,5-dione) (I), 4-methylurazole (II), and its carbon analog, 4,4-dimethylpyrazolidine-3,5-dione (III), react with 2-deoxy-D-ribose (2-deoxy-D-erythro-pentose) in an aqueous solution at room temperature in a regioselective manner (a single substitution on a hydrazidic nitrogen, no reaction on the imide nitrogen) to give a mixture of four nucleosides. These are α and β pyranosides (p) and α and β furanosides (f). The α p forms in a stereoselective manner. A crystalline precipitate is formed in each of the above reactions, which is an exclusive enantiospecific product, 1R, 2R α p. I with 2-deoxy-L-ribose gives a precipitate with the exclusive 1S, 2S α p stereochem. With 2-deoxy-D-glucose (2-deoxy-D-arabino-hexose) the reaction with I is stereospecific, since only one isomer, β p, forms in the solution Causes of enhanced reactivity of I with sugars were also studied. It was found that cyclic hydrazide analogs of I, such as II and III, are reactive, but open-chain analogs, 1,2,-diacetylhydrazine and 1,2-dicarbethoxyhydrazine, are not. Although this reactivity assessment was done qual. and under restrictive reaction conditions, it still may be valuable for understanding α -effect of hydrazide nucleophiles. The prebiotic significance of our results is discussed.
RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:229701 CAPLUS
DN 140:217948
TI Synthesis of D- and L-deoxyribose
IN Hu, Shougang; Wu, Yulin
PA Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 19 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1349999	A	20020522	CN 2001-132068	20011030
PRAI	CN 2001-132068		20011030		

OS CASREACT 140:217948; MARPAT 140:217948
AB The process comprises etherifying D- or L-α-propynyl-2,2-dimethyl-1,3-dioxolane-4-methanol with dihydrofuran or R1Z (R1 = R2R3R4Si, benzyl, benzoyl, benzoyloxy, acetyl, acetoxy, methoxymethyl, or benzyloxymethyl; Z = X, trifluoromethylsulfonyl, benzoyl, acetyl, or methoxy; and R2, R3, and/or r4 = C1- 6 alkyl) in the presence of amine or NaH (at a molar ratio of 1:1-5:0-100) at (-78)°-reflux temperature for 0.5-50 h to obtain D- or L-4-(1-R-3-butynyl)-2,2-dimethyl-1,3-dioxolane; hydrogenating in the presence of Lindlar catalyst (such as Pd/BaSO4/Pd(OAc)2 or Pd/CaCO3/Pd(OAc)2) at room temperature-reflux temperature for 10

min-50 h to obtain D- or L-4-(1-RO-3-butenyl)-2,2-dimethyl-1,3-dioxolane; fragmentating with O3 then with Me2S at (-78)°-reflux temperature for 1-48 h, and then hydrolyzing (or reducing with reductant in the presence of catalyst such as 10% Pd/C, Raney Ni, etc. with R = benzyl) and cyclizing with acid in water or organic solvent at room temperature-reflux temperature for 1-48 h.

L5 ANSWER 11 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:60523 CAPLUS
DN 140:94225
TI Method for producing 2-deoxy-L-ribose from 2-deoxy-D-ribose
IN Kang, Jae-Sung; Yun, Mi-Hong; Lee, Sang-Dae; Jeon, Byoung-Chan; Shin, Jeong-Ah
PA Samchully Pharm. Co., Ltd., S. Korea
SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004007513	A1	20040122	WO 2003-KR1398	20030715
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004006826	A	20040124	KR 2002-41378	20020715
CA 2492558	A1	20040122	CA 2003-2492558	20030715
AU 2003281047	A1	20040202	AU 2003-281047	20030715
EP 1556396	A1	20050727	EP 2003-741579	20030715
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005176950	A1	20050811	US 2003-521022	20030715
CN 1668626	A	20050914	CN 2003-816606	20030715
JP 2005538080	T	20051215	JP 2004-521271	20030715
IN 2005KN00186	A	20051104	IN 2005-KN186	20050214
PRAI KR 2002-41378	A	20020715		
WO 2003-KR1398	W	20030715		

OS CASREACT 140:94225; MARPAT 140:94225
AB The present invention relates to a economic synthetic method of 2-deoxy-L-ribose from 2-deoxy-D-ribose with easy reaction, separation and purification The present invention consists of four steps including protection, activation 3-and 4-OH groups, inversion and deprotection step. In respect to the cost for equipment, reagent and operation, by the present invention, 2-deoxy-L-ribose can be produced more economically because the invention uses 2-deoxy-L-ribose which is abundant in nature and easily synthesized from D-glucose, and adopt simple and yielding process.
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 12 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:952847 CAPLUS
DN 138:369069

TI 2-Deoxy-L-ribose from an L-arabinono-1,5-lactone
AU Stewart, Alistair J.; Evans, Richard M.; Weymouth-Wilson, Alexander C.; Cowley, Andrew R.; Watkin, David J.; Fleet, George W. J.
CS Dyson Perrins Laboratory, Oxford University, Oxford, OX1 3QY, UK
SO Tetrahedron: Asymmetry (2002), 13(24), 2667-2672
CODEN: TASYE3; ISSN: 0957-4166
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 138:369069
AB A practical synthesis of 2-deoxy-L -ribose from L-arabinose depends on the efficient reduction by iodide of a triflate α to a lactone. The X-ray crystal structure of 3,4-O-isopropylidene-L-arabinono-1,5-lactone is reported.
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 13 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:879195 CAPLUS
DN 138:205255
TI A concise approach to the synthesis of L- and D-deoxyribose
AU Hu, Shou-Gang; Wu, Yi-Kang; Wu, Yu-Lin
CS State Key Laboratory of Bioorganic and Natural Products Chemistry Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep. China
SO Chinese Journal of Chemistry (2002), 20(11), 1358-1362
CODEN: CJOCEV; ISSN: 1001-604X
PB Science Press
DT Journal
LA English
OS CASREACT 138:205255
AB D-Deoxyribose, the basic structure unit of DNA, and its antipode L-deoxyribose were concisely synthesized from easily available D- and L-glyceralaldehydes using a known convenient diastereoselective propargylation as the key step.
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 14 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:497680 CAPLUS
DN 137:232817
TI A practical synthesis of L-ribose
AU Akagi, Masao; Omae, Daichi; Tamura, Yoshinori; Ueda, Tetsujiro; Kumashiro, Tetsuya; Urata, Hidehito
CS Osaka University of Pharmaceutical Sciences, Osaka, 569-1094, Japan
SO Chemical & Pharmaceutical Bulletin (2002), 50(6), 866-868
CODEN: CPBTAL; ISSN: 0009-2363
PB Pharmaceutical Society of Japan
DT Journal
LA English
OS CASREACT 137:232817
AB L-Ribose was synthesized by a simple four-step method with overall yield of 76.3% from a protected L-arabinose derivative, which is a compatible intermediate for the synthesis of L-deoxyribose. The key step of this strategy is the Swern oxidation and subsequent stereoselective reduction accompanied by inversion of the 2-hydroxy group of protected L-arabinose.
RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 15 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:428922 CAPLUS
DN 137:6356

TI Processes for the synthesis of L-nucleoside derivatives from L-arabinoaminooxazoline

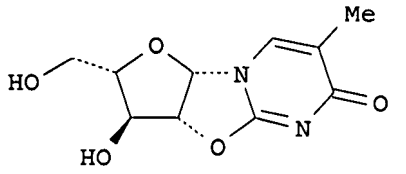
IN Iizuka, Hajime; Togashi, Kazuhiko; Suzuki, Tsuneji
PA Mitsui Chemicals, Inc., Japan

SO PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002044194	A1	20020606	WO 2001-JP10437	20011129
	W: CN, IN, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	JP 2002241390	A	20020828	JP 2001-365022	20011129
	EP 1348712	A1	20031001	EP 2001-998189	20011129
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	US 2004063926	A1	20040401	US 2003-433004	20030529
	US 7125983	B2	20061024		
	JP 2006232861	A	20060907	JP 2006-162468	20060612
PRAI	JP 2000-362081	A	20001129		
	JP 2000-380585	A	20001214		
	JP 2001-365022	A3	20011129		
	WO 2001-JP10437	W	20011129		

OS CASREACT 137:6356; MARPAT 137:6356

GI



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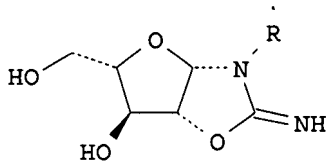
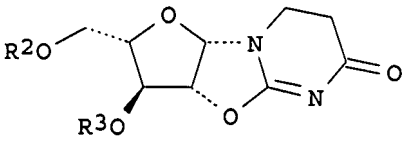
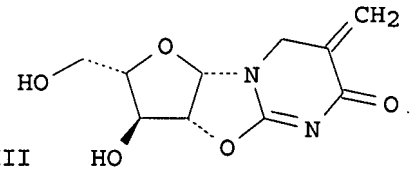


II



III



IV

AB Disclosed are a novel process for preparing 2,2'-anhydro-1-(β-L-arabinofuranosyl)thymine (I) from L-arabinoaminooxazoline (II; R = H), which is novel and a useful intermediate; a novel process for preparing L-thymidine from I; and a novel process for preparing an L-2-deoxyribose derivative useful as an intermediate through an L-2,2'-anhydro-5,6-dihydrocyclouridine derivative (III; R2, R3 = H, hydroxy-protecting group) which is prepared via cyclocondensation of II (R = H) with alkyl acrylate to III (R2 = R3 = H). These processes enable the synthesis of various L-nucleoside derivs. which were difficult to synthesize. Thus, chlorination of 10 g Et α-hydroxymethylacrylate ester by SOCl2 at 90° for 2 h to Et α-chloromethylacrylate followed by N-alkylation of 11.8 g L-arabinoaminooxazoline II (R = H) in N,N-dimethylacetamide at room temperature for 4 h gave 60.5% II.HCl [R = CH2C(:CH2)CO2Et] which (10.5 g) was cyclized by treatment with 0.9 g Na2CO3 in the presence of hydroquinone in

H2O under ice-cooling for 15 h followed by neutralization with AcOH to give an. aqueous solution containing L-2,2'-anhydro-5-methylene-5,6-dihydrouridine (IV) (86.9% yield). The above aqueous solution was added dropwise to a suspension of 1.05 g 5% Pd-Al2O3 in H2O at 80° for 1 h under H atmospheric to give 86.6% I. I (9.81 g) was suspended in 287 mL EtOAc and 39.6 mL DMF, treated with 18.0 g acetyl bromide, and allowed to react at 80° for 1 h to give 78.0% L-3',5'-di-O-acetyl-2'-bromothymidine which was hydrogenated over 5% Pd-Al2O3 in the presence of NaOAc in 332 mL MeOH at room temperature under normal H pressure to give L-3',5'-di-O-acetylthymidine (V). Deacetylation of 7.15 g V with NH3 in MeOH at 6° for 3 days gave 93.4% L-thymidine.

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 16 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:264530 CAPLUS
DN 137:169728
TI A stereospecific synthesis of L-deoxyribose, L-ribose and L-ribosides
AU Shi, Zhen-Dan; Yang, Bing-Hui; Wu, Yu-Lin
CS Shanghai Institute of Organic Chemistry, State Key Laboratory of Bio-organic and Natural Products Chemistry, Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep. China
SO Tetrahedron (2002), 58(16), 3287-3296
CODEN: TETRAB; ISSN: 0040-4020
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 137:169728
AB Using an inexpensive D-galactose from the chiral pool, L-deoxyribose, L-ribose and their derivs. were synthesized via mild reaction conditions. During the synthesis of L-deoxyribose, the key deoxygenation of the 2-hydroxy group of 3,5-O-dibenzyl-methyl-L-arabinofuranoside was performed by reduction of the corresponding triflate with tetrabutylammonium borohydride in high yield. During the synthesis of L-ribose, the key step of inversion of the 2-hydroxy group in the same substrate was carried out by intramol. SN2 tandem reaction. Then the L-ribosyl donors were submitted to glycosidations according to Vorbruggen's conditions to give L-ribosides (L-uridine, L-5-fluorouridine, L-iodouridine, L-thymidine, L-puridine, L-adenosine and L-guanosine) in excellent yields.

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 17 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:136964 CAPLUS
DN 137:6315
TI Efficient synthesis of 2-deoxy-l-erythro-pentose (2-deoxy-l-ribose) from l-arabinose
AU Chong, Youhoon; Chu, Chung K.
CS College of Pharmacy, Center for Drug Discovery, Department of Pharmaceutical and Biomedical Sciences, The University of Georgia, Athens, GA, 30602, USA
SO Carbohydrate Research (2002), 337(5), 397-402
CODEN: CRBRAT; ISSN: 0008-6215
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 137:6315
AB An efficient and practical route for the large-scale synthesis of 2-deoxy-L-erythro-pentose (2-deoxy-L-ribose) starting from L-arabinose was developed using Barton-type free-radical deoxygenation reaction as a key step. The radical precursor,

a phenoxythiocarbonyl ester, was prepared in situ, and the most efficient deoxygenation was achieved by slow addition of tributyltin hydride to the reaction mixture

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 18 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:886551 CAPLUS
DN 136:34273
TI Immobilized spiegelmer nucleic acids and their usage as affinity ligands
IN Burmeister, Jens; Burgstaller, Petra; Klussmann, Sven; Klein, Thomas; Frauendorf, Christian
PA Noxxon Pharma A.-G., Germany
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001092566	A2	20011206	WO 2001-EP6014	20010525
	WO 2001092566	A3	20020919		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2001069039	A5	20011211	AU 2001-69039	20010525
	EP 1283881	A2	20030219	EP 2001-947321	20010525
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2005208487	A1	20050922	US 2003-296506	20030521
PRAI	DE 2000-10026300	A	20000526		
	WO 2001-EP6014	W	20010525		

AB The invention relates to the immobilization of spiegelmer (mirror-image) nucleic acids onto a matrix. The spiegelmer nucleic acids are functionally active. Functionalized nucleic acids are coupled to the matrix via their 3' end. The invention further relates to the use of the immobilized nucleic acids as affinity ligands in chromatog., apheresis, and for sensors. Thus amino-modified and 32P-labeled DNA was synthesized and immobilized onto Eupergit; the conjugation was checked by radiochem. anal. Tritium-labeled GnRH peptide was synthesized and the binding on the labeled matrix was evaluated.

L5 ANSWER 19 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:798218 CAPLUS
DN 135:331440
TI Preparation of substituted sulfonylaminopyrimidines as endothelin receptor antagonists
IN Boss, Christoph; Bolli, Martin; Clozel, Martine; Fischli, Walter; Weller, Thomas
PA Actelion Pharmaceuticals Ltd., Switz.
SO PCT Int. Appl., 124 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001081338	A1	20011101	WO 2001-EP4133	20010411

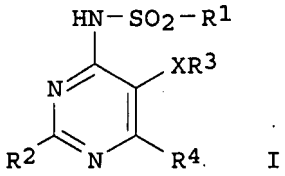
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI WO 2000-EP3692 W 20000425

OS MARPAT 135:331440

GI



I

AB The present invention relates to novel substituted pyrimidines I (e.g. rac-5-isopropyl-N-[5-(2-methoxyphenoxy)-2-(4-pyridyl)-6-(tetrahydrofuran-2-ylmethoxy)-4-pyrimidinyl]-2-pyridinesulfonamide) and pharmaceutically acceptable salts thereof and their use as active ingredients in the preparation of pharmaceutical compns. The invention also concerns related aspects including processes for the preparation of the compds., pharmaceutical compns. containing one or more I and especially their use as endothelin receptor antagonists. In I: R1 = aryl; aryl-lower alkyl; aryl-lower alkenyl; heteroaryl; heteroaryl-lower alkyl. R2 = H; halogen; trifluoromethyl; lower alkyl; lower alkylamino; lower alkyloxy; lower alkylsulfono; lower alkylsulfinyl; lower alkylthio; lower alkylthio-lower alkyl; hydroxy-lower alkyl; hydroxy-lower alkyloxy; lower alkyloxy-lower alkyl; lower alkyloxy-lower alkyloxy; hydroxy-lower alkyloxy-lower alkyl; hydroxy-lower alkyloxy-lower alkyloxy; lower alkyloxy-lower alkyloxy-lower alkyloxy; hydroxy-lower alkylamino; lower alkylamino-lower alkyl; amino; di-lower alkylamino; [N-(hydroxy-lower alkyl)-N-(lower alkyl)]amino; aryl; arylamino; aryl-lower alkylamino; arylthio; aryl-lower alkylthio; aryloxy. Also, R2 = aryl-lower alkyloxy; aryl-lower alkyl; arylsulfinyl; heteroaryl; heteroaryloxy; heteroaryl-lower alkyloxy; heteroarylamino; heteroaryl-lower alkylamino; heteroaryl-lower alkylthio; heteroaryl-lower alkyl; heteroarylsulfinyl; heterocyclyl; heterocyclyl-lower alkyloxy; heterocyclyloxy; heterocyclylamino; heterocyclyl-lower alkylamino; heterocyclylthio; heterocyclyl-lower alkylthio; heterocyclyl-lower alkyl; heterocyclylsulfinyl; cycloalkyl; cycloalkyloxy; cycloalkyl-lower alkyloxy; cycloalkylamino; cycloalkyl-lower alkylamino; cycloalkylthio; cycloalkyl-lower alkyl; cycloalkylsulfinyl; alkyloxycarbonyl; carboxy; cycloalkyl-lower alkylthio; cyano; aminocarbonyl. R3 = phenyl; mono, di- or trisubstituted Ph substituted with lower alkyl, lower alkenyl, lower alkyloxy, amino, lower alkylamino, amino-lower alkyl, trifluoromethyl, trifluoromethoxy, halogen, lower alkylthio, hydroxy, hydroxy-lower alkyl, cyano, carboxy, alkoxycarbonyl, lower alkanoyl, formyl; benzofuranyl; aryl; heteroaryl. X = O; S; NH; CH2 or a bond; R4 = N(CH2)2Z(CH2)2 (Z = = O, imino, S, SO, or SO2) and substituted alkoxy as specified in the claims. Ninety-two example prepns. are included, but the methods of preparation are not claimed. IC50 (concentration of antagonist inhibiting 50% of the specific binding of ET-1) values were determined for some of the claimed compds. and were as low as 6 nM (rac-5-methylpyridine-2-sulfonic acid [5-(2-methoxyphenoxy)-6-(tetrahydrofuran-2-ylmethoxy)-2-[2-(5-thioxo-4,5-

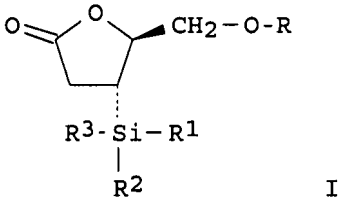
dihydro-[1,2,4]oxadiazol-3-yl)pyridin-4-yl]pyrimidin-4-yl]amide). Also, pA2 (neg. value of logarithm of antagonist concentration that induces 2-fold shift in concentration of endothelin needed to get half-maximal contraction on isolated rat aortic rings or rat tracheal rings) are reported for 5 I.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 20 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:795034 CAPLUS
DN 135:331636
TI Preparation of D- or L-2-deoxy-ribo-lactones or aldoses
IN Schneider, Manfred; Fazio, Fabio
PA Germany
SO Ger. Offen., 12 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 10020275	A1	20011031	DE 2000-10020275	20000425
PRAI DE 2000-10020275		20000425		

OS CASREACT 135:331636; MARPAT 135:331636
GI



I

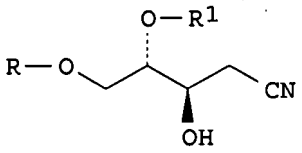
AB Preparation of title compds. [(I); R = H, (substituted)alkyl, (substituted) aryl, (substituted) benzyl, sugar protecting group or activating group; R1-R3 = (substituted)(cyclo)alkyl, (substituted)aryl], and their open aldose forms, potentially useful for the synthesis of natural or unnatural D- or L-nucleic acids (no data), was claimed. Thus, beginning from R-5-hydroxymethyl-5H-furan-2-one, 2-deoxy-D-ribose was prepared in 5 steps, by 5-O-protection, regio- and stereoselective silylation, silyl-hydroxy exchange, ring-opening reduction, and deprotection.

L5 ANSWER 21 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:730693 CAPLUS
DN 135:273161
TI Optically active cyanobutanetriol derivatives and process for their preparation and their use in the preparation of 2-deoxy-L-ribonolactone
IN Choi, Young-Ro; Kim, Kwan-Soo; Kim, Jin-Whan
PA Kukje Pharma. Ind. Co., Ltd., S. Korea
SO PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001072698	A1	20011004	WO 2001-KR354	20010307

W: CN, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

KR 2001092864 A 20011027 KR 2000-15512 20000327
PRAI KR 2000-15512 A 20000327
OS CASREACT 135:273161; MARPAT 135:273161
GI



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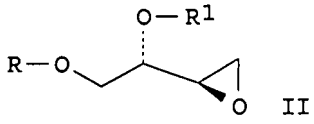


II

AB Optically active (2S,3R)-4-cyanobutane-1,2,3-triol derivs. (I; R, R1 = H, hydroxy-protecting group) useful for preparing 2-deoxy-L-ribose by hydrolysis, lactonization, and subsequent reduction of 2-deoxy-L-ribonolactone, are prepared by the reaction of an alkali metal cyanide with an ethyloxirane derivative (II).
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 22 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:439031 CAPLUS
DN 133:193335
TI A novel synthesis of 2-deoxy-L-ribose
AU Fazio, Fabio; Schneider, Manfred P.
CS FB 9-Bergische Universitat-GH-Wuppertal, Wuppertal, D-42097, Germany
SO Tetrahedron: Asymmetry (2000), 11(9), 1869-1876
CODEN: TASYE3; ISSN: 0957-4166
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 133:193335
AB The authors report a new synthesis of 2-deoxy-L-ribose starting from the com. available (R)-(+)-5-hydroxymethyl-5H-furan-2-one. The key step is a 1,4-addition of (PhMe2Si)2Cu(CN)Li2 which proceeds with complete diastereoselection.
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 23 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:378906 CAPLUS
DN 133:164216
TI Synthesis of 3,5-O-benzylidene-2-deoxy-L-riboaldose from 5,5-dihydroxy-2-phenyl-1,3-dioxane
AU Ulven, Trond; Carlsen, Per H. J.
CS Department of Organic Chemistry, Norwegian University of Science and Technology, Trondheim, N-7034, Norway
SO Synthetic Communications (2000), 30(13), 2275-2280
CODEN: SYNCAV; ISSN: 0039-7911
PB Marcel Dekker, Inc.
DT Journal
LA English
OS CASREACT 133:164216
AB The asym. alkylation of 2-phenyl-1,3-dioxan-5-one was achieved via the

RAMP-hydrazone. Regeneration of the ketone followed by stereoselective reduction and ozonolysis, gave the protected 2-deoxy-L-ribose, 3,5-O-benzyldiene-2-deoxy-L-erythro-pentoaldose with 98% e.e. Removal of the benzylidene yielded the unnatural 2-deoxy-L-ribose.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 24 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:28924 CAPLUS
DN 132:166402
TI Improved synthesis of 2-deoxy-L-ribose
AU Zhang, Weijian; Ramasamy, Kanda S.; Averett, Devron R.
CS ICN Pharmaceuticals, Inc., Costa Mesa, CA, 92626, USA
SO Nucleosides & Nucleotides (1999), 18(11 & 12), 2357-2365
CODEN: NUNUD5; ISSN: 0732-8311
PB Marcel Dekker, Inc.
DT Journal
LA English
OS CASREACT 132:166402
AB Improved synthesis of 2-deoxy-L-ribose and the corresponding 2-deoxy-3,5-di-O-p-toluoyl-α-L-erythro-pentofuranosyl chloride are described from L-arabinose.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 25 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:633957 CAPLUS
DN 131:351547
TI Efficient Synthesis of 2-Deoxy L-Ribose from L-Arabinose: Mechanistic Information on the 1,2-Acyloxy Shift in Alkyl Radicals
AU Jung, Michael E.; Xu, Yue
CS Department of Chemistry and Biochemistry, University of California, Los Angeles, CA, 90095-1569, USA
SO Organic Letters (1999), 1(10), 1517-1519
CODEN: ORLEF7; ISSN: 1523-7060
PB American Chemical Society
DT Journal
LA English
AB Conversion of inexpensive L-arabinose into the ethylthio ortho ester followed by generation of the dialkoxyalkyl radical produces the desired 2-deoxy-L-ribose triester in excellent overall yield. It has been shown that a similar dialkoxyalkyl radical is not an intermediate in the 1,2-acyloxy shift of the anomeric radical.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 26 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:539740 CAPLUS
TI New methods for the preparation of potentially antiviral modified nucleosides.
AU Jung, M. E.; Toyota, A.; Nichols, C. J.; Xu, Y.; Kreschik, O.
CS Department of Chemistry and Biochemistry, University of California, Los Angeles, Los Angeles, CA, 90095-1569, USA
SO Book of Abstracts, 218th ACS National Meeting, New Orleans, Aug. 22-26 (1999), CARB-007 Publisher: American Chemical Society, Washington, D. C.
CODEN: 67ZJA5
DT Conference; Meeting Abstract
LA English
AB The synthesis of modified nucleosides with antiviral properties will be described. We have developed new synthetic methods for

preparation of several new classes of modified nucleosides as new potential agents for the treatment of HIV and other viral infections. In particular we have been interested in the activity of modified nucleosides in the L-enantiomeric series, e.g., analogs of the active antiviral agents L-3TC, L-ddC and L-5--FddC. We will describe our work on the preparation of L-carbohydrates, both L-ribose and 2-deoxy L -ribose and their derived nucleosides from inexpensive precursors by efficient routes. A novel technique for the prodn . of radical rearrangement products in carbohydrate chemical will be presented. The development of new methods for preparation of both the D- and L- enantiomers of 'methylene-expanded' oxetanocins will be discussed. The enantiospecific total synthesis of the L-2',3'-dideoxy isonucleosides (both the oxa and thia analogs) via regioselective opening of optically active C-sym. 1, 4-pentadiene bis-epoxide will be described.

L5 ANSWER 27 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:448569 CAPLUS
DN 131:102430
TI Synthesis and testing of new modified nucleosides
AU Jung, Michael E.; Nichols, Christopher J.; Kretschik, Oliver; Xu, Yue
CS Department of Chemistry and Biochemistry, University of California, Los Angeles, CA, 90095-1569, USA
SO Nucleosides & Nucleotides (1999), 18(4 & 5), 541-546
CODEN: NUNUD5; ISSN: 0732-8311
PB Marcel Dekker, Inc.
DT Journal; General Review
LA English
AB A review with 15 refs. on the high-yielding synthesis of several classes of modified nucleosides. We have prepared both the D- and L-enantiomers of the methylene-expanded oxetanocin isonucleosides and the L-2'-3'-dideoxy isonucleosides (both the oxa and thia analogs) as well as new routes for the preparation of L-ribose and 2-deoxy L-ribose and their modified nucleosides.
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 28 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:320596 CAPLUS
DN 131:59027
TI The synthesis of L-ribose, 2-deoxy-L -ribose, and, an investigation of the mechanism of radical 1,2-acyloxy rearrangement, and, a study of the gene-specific transcription inhibition at the RNA polymerase-lacuv5 open complex
AU Xu, Yue
CS Univ. of California, Los Angeles, CA, USA
SO (1998) 205 pp. Avail.: UMI, Order No. DA9913075
From: Diss. Abstr. Int., B 1999, 59(11), 5867
DT Dissertation
LA English
AB Unavailable

L5 ANSWER 29 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:91210 CAPLUS
TI An improved synthesis of 2'-deoxy-L -ribose
AU Zhang, Weijian; Ramasamy, Kanda; Averett, Devron
CS ICN Pharmaceuticals, Inc., Costa Mesa, CA, 92626, USA
SO Book of Abstracts, 217th ACS National Meeting, Anaheim, Calif., March 21-25 (1999), CARB-050 Publisher: American Chemical Society, Washington, D. C.
CODEN: 67GHA6
DT Conference; Meeting Abstract
LA English
AB Naturally occurring sugars plays an important role in carbohydrate chemical

and nucleoside chemical Recently the search for unnatural sugars with unique structures has greately increased for the synthesis of nucleosides with new biol. activities. In particular, sugars with L-configuration have attracted remarkable attention after the newly reported antiviral and anticancer potency of 2'-deoxy and 2', 3'-dideoxy-L-nucleosies. However, the synthesis of L-ribose and 2'-deoxy-L-ribose remains problematic in view of efficiency and economy. We have modified the key step-deoxygenation by using diphenylsilane in dioxane replacing the more expensive and toxic tributyltin hydride. Herein, we describe an improved procedure for the preparation of 2'-deoxy-L-ribose from L-arabinose.

L5 ANSWER 30 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:612109 CAPLUS
DN 129:216851
TI Synthesis of L-ribose and 2-deoxy-L-ribose from D-ribose
IN Jung, Michael E.; Xu, Yue
PA The Regents of the University of California, USA
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9839347	A2	19980911	WO 1998-US4302	19980305
	WO 9839347	A3	19981022		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9866866	A	19980922	AU 1998-66866	19980305
PRAI	US 1997-40270P	P	19970305		
	WO 1998-US4302	W	19980305		

OS CASREACT 129:216851
AB A method for synthesizing L-ribose and 2-deoxy-L-ribose from inexpensive D-ribose is provided. L-Arabinose is converted into 2-deoxy-L-ribose by an alternate route.

L5 ANSWER 31 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:396806 CAPLUS
DN 129:136374
TI A de novo synthesis of ethyl 2-deoxy-L-ribosides
AU Jung, Michael E.; Nichols, Christopher J.
CS Department of Chemistry and Biochemistry, University of California, Los Angeles, CA, 90095, USA
SO Tetrahedron Letters (1998), 39(26), 4615-4618
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 129:136374
AB A short (7-step) and efficient synthesis of several derivs. of 2-deoxy-L-ribose has been accomplished from achiral precursors.
RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

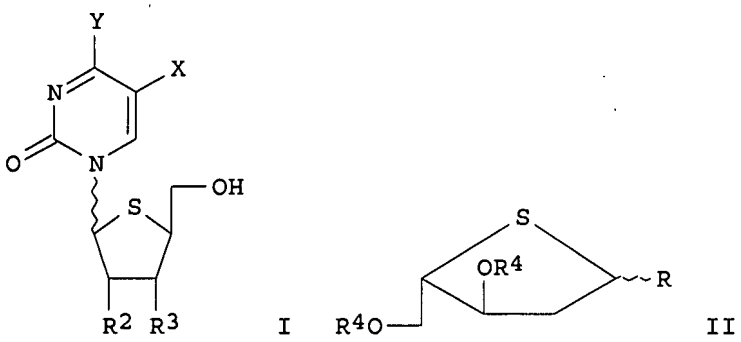
L5 ANSWER 32 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:51310 CAPLUS
DN 128:241079
TI Inhibitory potency of R-region specific antisense oligonucleotides against in vitro DNA polymerization and template-switching reactions catalyzed by HIV-1 reverse transcriptase
AU Borkow, Gadi; Arion, Dominique; Noronha, Anne; Scartozzi, Margherita; Damha, Masad J.; Parniak, Michael A.
CS Lady Davis Institute for Medical Research and McGill University AIDS Centre, SMBD-Jewish General Hospital, Montreal, QC, H3T 1E2, Can.
SO International Journal of Biochemistry & Cell Biology (1997), 29(11), 1285-1295
CODEN: IJBBFU; ISSN: 1357-2725
PB Elsevier Science Ltd.
DT Journal
LA English
AB Antisense oligonucleotides (AONs) targeted to the R-region near the 5'-LTR of HIV-1 genomic RNA inhibited both the synthesis of (-) strong stop DNA and the first template-switch reaction catalyzed by HIV-1 reverse transcriptase (RT) in vitro. The 18 nucleotide (nt) AONs used were identical in sequence but differed in the sugar component of the 3'-terminal nucleotide, with either 2'-deoxy-D-ribose (DNA), 2'-deoxy-L-ribose (L), or arabinose (ARA) in this position. All three AONs hybridized to complementary 18 nt RNA (Tm≈70°C) and specifically interacted with the target RNA HIV-1 sequence at 37°C. L was unable to serve as primer for RT-catalyzed DNA polymerization, whereas priming from ARA was about 30% that noted with DNA. Each of the three AONs resulted in similar 85-95% decreases in the amount of full length (-) strong stop DNA and up to 75% decreases in the first template-switch reaction products formed by RT, implying that elongation of the AONs did not enhance the inhibitory activity in vitro. A concomitant increase in a truncated DNA product corresponding to polymerization termination at the 5'-end of the AON was noted, indicating that RT was unable to displace the AON. Interestingly, near maximal inhibition in vitro an AON:target RNA template ratio of 1:1 was noted. Our results confirm the validity of our in vitro system for the anal. of potential antisense oligonucleotide inhibitors, and suggest that antisense oligonucleotides directed to the R-region of HIV-1 RNA may be effective inhibitors of the initial stages of HIV-1 proviral DNA synthesis.

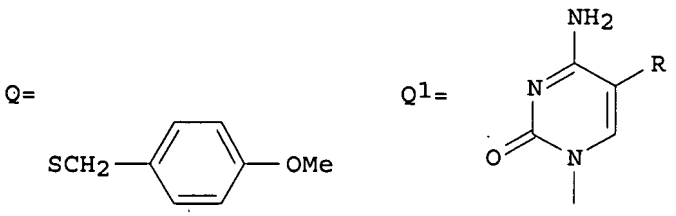
L5 ANSWER 33 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1997:410857 CAPLUS
DN 127:95468
TI Efficient syntheses of L-ribose and 2-deoxy L-ribose from D-ribose and L-arabinose
AU Jung, Michael E.; Xu, Yue
CS Dep. Chem. Biochem., Univ. California, Los Angeles, CA, 90095-1569, USA
SO Tetrahedron Letters (1997), 38(24), 4199-4202
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier
DT Journal
LA English
OS CASREACT 127:95468
AB Interconversion of the ends of D-ribose afforded in 6 steps and 45% overall yield L-ribose, from which 2-deoxy L-ribose was easily prepared In addition, inexpensive L-arabinose was also converted into 2-deoxy L-ribose via a reductive radical rearrangement of tri-O-benzoylarabinopyranosyl bromide.
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 34 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:410366 CAPLUS
DN 122:188032
TI Preparation of antiviral pyrimidine nucleosides containing L-thioribofuranose, L-deoxythioribofuranose, or L-dideoxydidehydrothioribofuranose
IN Miller, John Allen; Young, Robert John; Rahim, Saad George; Selwood, David Lawrence; Walker, Richard
PA University of Birmingham, UK; Wellcome Foundation Ltd.
SO PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9405687	A1	19940317	WO 1993-GB1858	19930903
	W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9349733	A	19940329	AU 1993-49733	19930903
	EP 658166	A1	19950621	EP 1994-908867	19930903
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 08504753	T	19960521	JP 1993-506988	19930903
PRAI	GB 1992-18810	A	19920904		
	WO 1993-GB1858	W	19930903		

OS CASREACT 122:188032; MARPAT 122:188032
GI

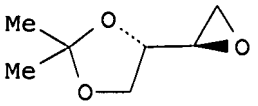




AB Antiviral nucleosides of formula [I; Y = OH, NH2; X = H, OH, SH, halo, CF3, Me, C2-6 alkyl, C1-6 haloalkyl, C1-3 hydroxyalkyl, formyl, C2-6 alkenyl, C1-6 haloalkenyl, C1-6 alkynyl, C1-6 alkoxy, C1-6 alkylthio, C1-6alkoxy-C1-2 alkyl, C1-6 alkylthiomethyl, amino, mono-C1-6 alkylthiomethyl, amino, mono-C1-6 alkylamino, di(C1-6 alkyl)amino, cyano, thiocyanate or NO2; R2 = H and R3 = OH or H or together R2 and R3 form a

C-C bond] and physiol. functional derivs. thereof are prepared Thus, 5-fluorocytosine was silylated by N,O-bis(trimethylsilyl)acetamide in MeCN at 80° and the resulting solution was cooled to room temperature, to which were successively added a solution of 2-deoxy-1,4-dithio-L-erythro-pentofuranoside (II; R = Q, R4 = p-nitrobenzoyl) in MeCN dropwise, N-iodosuccinimide in MeCN, and CF3SO3SiMe3 followed by stirring the resulting mixture for 2 h at room temperature to give II (R = Q1, R4 = p-nitrobenzoyl) as an anomeric mixture (α:β = 1.8:1). The latter mixture was deprotected with MeONa in MeOH to give an anomeric mixture of 2'-deoxy-5-fluoro-4'-thio-L-cytidine II (R = Q1, R4 = H). The β-anomer showed IC50 of 0.88 and 0.85 μM against hepatitis B virus-producing HepG2 cells and for inhibiting the infection of HT4-6C cells by HIV.

L5 ANSWER 35 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:251760 CAPLUS
DN 123:144385
TI Efficient synthesis of 2-deoxy-L-ribose starting from L-ascorbic acid
AU Kim, Kwan Soo; Ahn, Yeong Hee; Hurh, Eun Young; Lee, Eui Jae
CS Dep. Chem., Yonsei Univ., Seoul, 120-749, S. Korea
SO Journal of the Korean Chemical Society (1994), 38(11), 783-4
CODEN: JKCSEZ; ISSN: 1017-2548
PB Korean Chemical Society
DT Journal
LA English
GI



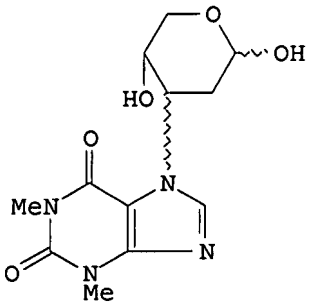
I

AB The title compound was prepared in 7 steps via the epoxide I in 18% overall yield starting from L-ascorbic acid.

L5 ANSWER 36 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1992:511955 CAPLUS
DN 117:111955
TI A convenient and stereoselective synthesis of 2'-deoxy-β-L-ribonucleosides
AU Fujimori, Shizuyoshi; Iwanami, Naoko; Hashimoto, Yuichi; Shudo, Koichi
CS Fac. Pharm. Sci., Univ. Tokyo, Tokyo, 113, Japan
SO Nucleosides & Nucleotides (1992), 11(2-4), 341-9
CODEN: NUNUD5; ISSN: 0732-8311
DT Journal
LA English
OS CASREACT 117:111955
AB 2'-Deoxy-β-L-ribonucleosides containing usual bases which are useful as synthons for modified oligodeoxyribonucleotides, were conveniently synthesized by a stereoselective glycosidation of 1-chloro-2-deoxy-3,5-di-O-p-toluoyl-α-L-erythro-pentofuranose with nucleoside bases. The method is suitable for large-scale prepns.

L5 ANSWER 37 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:154771 CAPLUS
DN 110:154771
TI Anomalously coupled nucleosides. IV. Synthesis of 2,3-dideoxy-3-(7-theophyllyl)-D-pentopyranoses
AU Andersen, Lene; Lau, Jesper; Pedersen, Erik B.
CS Dep. Chem., Odense Univ., Odense, DK-5230, Den.

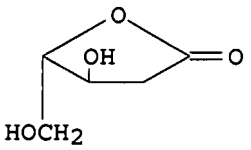
SO Chemica Scripta (1988), 28(3), 307-9
CODEN: CSRPB9; ISSN: 0004-2056
DT Journal
LA English
OS CASREACT 110:154771
GI



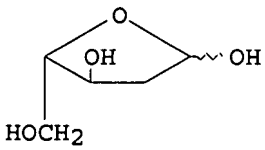
I

AB Threo and erythro isomers of 2,3-dideoxy-3-(7-theophyllyl)-D-pentopyranoses (I) were prepared from theophylline and 2-deoxy-D-ribose by coupling in a mixture of phosphorus pentoxide, tributylamine, and trichloromethane. The structures were determined by 13C-NMR, 1H-NMR, and mass spectrometry.

L5 ANSWER 38 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1988:167793 CAPLUS
DN 108:167793
TI Synthesis of 2-deoxyribose
AU Gakhokidze, R. A.; Sidamonidze, N. N.
CS Tbilis. Gos. Univ., Tbilisi, USSR
SO Zhurnal Organicheskoi Khimii (1987), 23(5), 1126-7
CODEN: ZORKAE; ISSN: 0514-7492
DT Journal
LA Russian
OS CASREACT 108:167793
GI



I

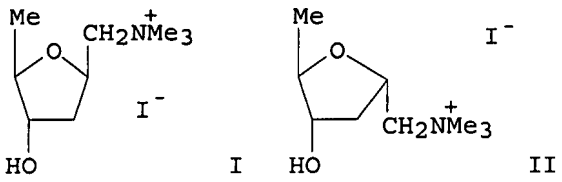


II

AB Intramol. rearrangement of 3,4-O-isopropylidene-L-arabinose by Pb(OH)2 in H2O gave 47.1% lactone I, which was reduced by NaBH4-AcOH to give 59.3% titlecompd. II.

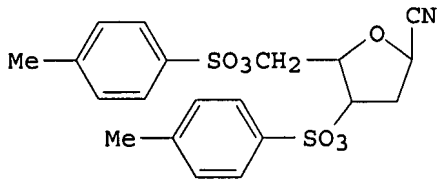
L5 ANSWER 39 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1982:69258 CAPLUS
DN 96:69258
TI Stereospecific synthesis of muscarines and allomuscarines in D- and L-series
AU Pochet, Sylvie; Huynh Dinh Tam
CS Dep. Biochim. Genet. Mol., CNRS, Paris, 75724, Fr.
SO Journal of Organic Chemistry (1982), 47(2), 193-8

CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
GI

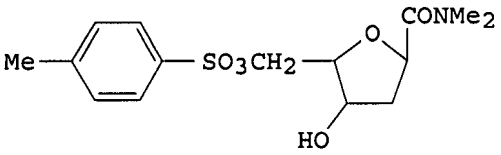


I

II



III



IV

AB D-(-)-(1R,3S,4R)-Muscarine iodide (I) and L-(+)-(1S,3S,4R)-allomuscarine iodide (II) were synthesized from 2-deoxy-D-ribose. Treatment of the β-cyanide III with a methanolic HCl solution gave a mixture of Me esters. These esters reacted with Me2NH at 90°C to yield the corresponding deprotected dimethylamide IV. Selective tosylation of IV in dry pyridine and reduction of the resulting tosyl amide with LiAlH4 in refluxing THF, followed by quaternization with Me iodide gave I. The same procedure with the α-cyanide gave II. L-(+)-(1S,3R,4S)-Muscarine iodide and D-(-)-(1R,3R,4S)-allomuscarine iodide were analogously prepared from 2-deoxy-L-ribose. The anomeric purity of these compds. was determined by spectroscopy.

L5 ANSWER 40 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1970:520835 CAPLUS
DN 73:120835
TI Convenient synthetic route to 2-deoxy-L-ribose and 2-deoxy-D-xylose
AU Schimmel, Steven D.; Bevill, Rardon D.
CS Div. of Biol. Sci., Albert Einstein Coll. of Med., Bronx, NY, USA
SO Analytical Biochemistry (1970), 37(2), 385-94
CODEN: ANBCA2; ISSN: 0003-2697
DT Journal
LA English
AB 2-Deoxy-L-erythro-pentose (I) and 2-deoxy-D-threo-pentose (II) were prepared from 2-deoxy-D-lyxo-hexose and 2-deoxy-D-arabino-hexose, resp. Conversion of the 2-deoxy-D-hexoses into the Me 2-deoxy-D-hexofuranosides, followed by IO4- oxidation, reduction with borohydride, and mild acid hydrolysis, gave I and II in 55 and 44% yield, resp. I was identified by chromatog. II was identified by paper chromatog.

L5 ANSWER 41 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1965:431950 CAPLUS
DN 63:31950

OREF 63:5722d-e
TI The synthesis of amino sugars from glycopyranosiduloses
AU Collins, P. M.; Overend, W. G.
CS Univ. London
SO Journal of the Chemical Society (1965), (May), 3448-56
CODEN: JCSOA9; ISSN: 0368-1769
DT Journal
LA Unavailable
AB A route to amino sugars from partially protected glycopyranosides by sequential oxidation to the corresponding glycopyranosidulose, oximation, reduction of the oxime, and removal of protecting groups has been evaluated. In this way successful syntheses of 2-amino-2-deoxy-L-ribose and 2-amino-2,6-dideoxy-L-talose (pneumosamine) have been effected. The steric course of the reduction stage is discussed. An intermediate addition compound, formed in the oximation, under mild conditions, of methyl 3,4-O-isopropylidene-β-L-erythro-pentopyranosidulose, has been isolated and its structure determined. The behavior of glycopyranosiduloses in protic solvents has been examined and the results are discussed in the light of current ideas about the behavior of ketones in similar solvents.

L5 ANSWER 42 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1963:403768 CAPLUS
DN 59:3768
OREF 59:728d-g
TI New syntheses of 6-deoxy-L-talose and 2-amino-2,6-dideoxy-L-talose
AU Collins, P. M.; Overend, W. G.
CS Birkbeck Coll., London
SO Chemistry & Industry (London, United Kingdom) (1963) 375-6
CODEN: CHINAG; ISSN: 0009-3068
DT Journal
LA Unavailable
AB Oxidation of Me 6-deoxy-3,4-O-isopropylidene-α-L-galactopyranoside with CrO3 in pyridine gave 35% Me 3,4-O-isopropylidene-α-L-lyxo-pentos-4-ulopyranoside (I), m. 72-3°, [α]D -110.6° (c 1.07, CHCl3). Catalytic hydrogenation of I followed by a 1-hr. hydrolysis at 18° with 0.2N HCl gave a mixture containing a Me α-L-deoxyhexopyrano-side, isolated as 63% of the triacetate (II), m. 91-2°, [α]D -75.9° (c 3.96, MeOH) [also given as -73.3° (c 1.5, MeOH)]. II (57%) was also formed from Me 6-deoxy-2,3-O-isopropylidene-L-lyxo-pentos-4-ulopyranoside (prepared by the oxidation of Me 6-deoxy-2,3-O-isopropylidene-α-L-mannopyranoside), which was reduced, freed from Me2CO, and acetylated. II has the L-talo configuration, and deacetylation gave 71% Me 6-deoxy-α-L-talopyranoside, m. 63-5°, [α]D -106° (c 1.98, H2O), which, with 2N HCl 18 hrs. at 70°, followed by purification by paper chromatography, gave 6-deoxy-L-talose, m. 119-21° , [α]D -20.5 ± 1.4° (c 2.28, H2O), identical with the compound isolated by Mac-Lennan (CA 55, 24925h) from the acid hydrolyzate of Actinomyces bovis. I gave 94% of the oxime, gum, b0.001 100-10°, [α]D -127° (c 0.9, CCl4), which, reduced with Li-AlH4 and hydrolyzed, gave a mixture of amino sugar glycosides, which on fractional crystallization yielded 44% of a Me aminoglycoside-HCl, C7H10ClNO4 (III), m. 265° (decomposition), [α]21D -84° (c 1.55, H2O), and 10% of an impure isomer (IV), [α]20D -168.6° (c 0.5, H2O). III, after acetylation and subsequent hydrolysis gave 52% 2-amino-2,6-dideoxy-L-talose-HCl (V), m. 163-4°, [α]D 9° (equilibrium) (c 2.3, H2O). V is identical with pneumosamine-HCl obtained from Type V pneumococcus (Barker, et al., CA 55, 10566i). IV gave rise to 2-amino-2,6-dideoxy-L-galactose; details are reserved for future publication. The synthesis of 2-amino-2-deoxy-L-ribose (VI) involved the following steps: Me

3,4-O-isopropylidene-L-erythro-pentos-4-ulopyranoside → 95% oxime [m. 105-7°, [α]22D 182° (c 1, EtOH)] → VI.HCl, m. 153-4°, [α]20D 5.6 (equilibrium) (c 1.96, H2O) (cf. Wolfrom, et al. CA 53, 6096d). Mother liquors from VI.HCl gave small amts. of 2-amino-2-deoxy-L-arabinose-HCl.

L5 ANSWER 43 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1954:18110 CAPLUS
DN 48:18110
OREF 48:3267e-i,3268a
TI Synthesis of 4-deoxy-L-ribose from D-lyxose
AU Kent, P. W.; Ward, P. F. V.
CS Oxford Univ., London
SO Journal of the Chemical Society (1953) 416-18
CODEN: JCSOA9; ISSN: 0368-1769
DT Journal
LA Unavailable
AB D-lyxose (5 g.) refluxed 5 hrs. with 100 cc. 0.5% HCl-MeOH, neutralized with dry Ag2CO3, and evaporated in vacuo, formed 4 g. Me α-D-lyxoside (I), m. 108-9° (from EtOAc), [α]22D 51.8° (c 0.6, H2O). I (3 g.) was shaken 24 hrs. with 50 cc. Me2CO and 0.5 cc. concentrated H2SO4, neutralized with anhydrous Na2CO3, and evaporated; distillation of the product with a trace of BaCO3 gave 2.8 g. Me 2,3-isopropylidene-α-D-lyxoside (II), m. 40-1°, b0.02 65°, n23D 1.4575 [α]22D 42.7° (c 0.8, EtOH). Me 2,3-isopropylidene-4-(p-toluenesulfonyl)-α-D-lyxoside (III), m. 96-7°, [α]22D -10.2° (c 1.85, EtOH), was prepared by treating 1.5 g. II in 10 cc. pyridine with 4 g. p-MeC6H4SO2Cl 24 hrs. at room temperature and diluting with H2O. Warming 1.15 g. III 3 hrs. at 90-100° with 25 cc. 0.1% HOAc and evaporation in vacuo over KOH gave Me 4-(p-toluenesulfonyl)-α-D-lyxoside (IV), n21D 1.5240, [α]21D 30° (c 1.4, CHCl3). IV (0.4 g.) in 10 cc. CHCl3 treated with 2 g. Na in 50 cc. MeOH 12 hrs. at room temperature, diluted with 50 cc. CHCl3, shaken with 100 cc. H2O, the aqueous layer neutralized with dilute H2SO4, evaporated, extracted with hot EtOAc, and the extract distilled at 0.02 mm. formed Me 3,4-anhydro-α-D-lyxoside (V), [α]22D 98.6° (c 1.4, Me2CO), n22D 1.4350. Refluxing 0.2 g. V 5 hrs. in 50 cc. Me2CO containing 5 cc. 2.04N HBr, neutralizing with PbCO3, and concentrating yielded 0.1 g. Me 4-bromo-4-deoxy-α-D-lyxoside (VI), m. 134-5° (from EtOAc), [α]21D 14.6° (c 0.7, MeOH). VI was readily oxidized with Pb(OAc)4 in HOAc; measurement of the rate in darkness, along with those of Me α-mannoside (VII) and Me α-glucoside, gave values for VI comparable to those for VII. Hydrogenation of 0.2 g. VI in 30 cc. MeOH over 1 g. Raney Ni and 0.1 g. Ca(OH)2, saturation with CO2, filtration, evaporation, extraction with hot EtOAc, and concentration of the extract gave 0.12 g. Me 4-deoxy-β-L-riboside (VIII), [α]21D 39.2° (c 0.2, H2O), n21D 1.4815. VIII (0.1 g.) hydrolyzed at 100° with 20 cc. N H2SO4, neutralized with Na2CO3, evaporated, and the residue extracted with hot EtOAc gave 0.06 g. 4-deoxy-L-ribose (IX), n22D 1.4920, [α]21D 23.1° (c 0.2, H2O), which reduced Fehling solution and formed a benzylphenylhydrazone, m. 102-3° (from EtOH-H2O). Dische Ph2NH tests were run 3.25 min. at 100° and the mol. extinction coeffs. measured for D-ribose (X) (0), 2-deoxy-L-ribose (XI) (2720), 3-deoxy-D-ribose (XII) (146), and IX (0). On paper chromatography with BuOH-EtOH-H2O (4:1:5) RG values, (cf. C.A. 44, 486c) were measured for X (0.34), XI (0.50), XII (0.60), and IX (0.53).

L5 ANSWER 44 OF 44 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1954:3442 CAPLUS

DN 48:3442
OREF 48:609f-h
TI Synthesis of some phosphates of 2-deoxy-
L-ribose
AU Allerton, R.; Overend, W. G.; Stacey, M.
CS Univ. Birmingham, UK
SO Chemistry & Industry (London, United Kingdom) (1952) 952-3
CODEN: CHINAG; ISSN: 0009-3068
DT Journal
LA Unavailable
AB β-Me 2-deoxy-L-ribopyranoside was phosphorylated with diphenyl phosphoryl chloride yielding the crystalline 3:4-bis(diphenyl phosphate) which on hydrogenation using PtO2 gave a sirupy 3:4 diphosphoric acid derivative (I). This was identified from the acridine (II) and cyclohexylamine (III) salts. Controlled hydrolysis of I with dilute HCl removed the methyl group yielding 2-deoxy-L-ribose-3,4-diphosphoric acid. A similar series of reactions starting with α or β-Me 2-deoxy-L-ribofuranoside gave the analogous 3,5-substituted derivative Tritylation and subsequent phosphorylation of α or β-Me 2-deoxy-L-ribofuranoside yielded diphenyl (5-trityl α or β-Me 2-deoxy-L-ribofuranoside-3) phosphate which on hydrogenation with PtO2 gave α or β-Me 2-deoxy-L-ribofuranoside-3-phosphoric acid (identified from solid II and III salts). Acidic hydrolysis gave 2-deoxy-L-ribose-3 phosphoric acid which was isolated as Pb salt. 2-Deoxy-L-ribose-5-phosphoric acid was prepared from α or β-Me 2-deoxy-L-ribofuranoside by preferential phosphorylation, followed by hydrogenation of the (mono) diphenyl phosphate with PtO2 followed by acidic hydrolysis and isolation as Pb salt.

=> s Kang Jae-Sung/AU
L7 14 KANG JAE-SUNG/AU

=> s l7 and 2-deoxy-L-ribose
9154777 2
53664 DEOXY
1564596 L
27946 RIBOSE
171 RIBOSES
28016 RIBOSE
(RIBOSE OR RIBOSES)
62 2-DEOXY-L-RIBOSE
(2(W)DEOXY(W)L(W)RIBOSE)
L8 2 L7 AND 2-DEOXY-L-RIBOSE

=> dis l8 1-2 bib abs

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:1240711 CAPLUS
DN 146:317149
TI Preparation method for 1-methoxy-2-deoxy-L-ribose without purification process for improving preparation yield and reducing production costs
IN Kang, Jae Sung; Kim, Kyung Il; Yun, Mi Hong; Yu, Gi Weon; Chang, Sun Ki; Kim, Min Kyu; Yi, Jeong Wu; Lee, Kwang Kuk
PA Samchully Pharm. Co., Ltd., S. Korea
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DT Patent
LA Korean
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	KR 2006072554	A	20060628	KR 2004-111227	20041223
PRAI	KR 2004-111227		20041223		

AB A preparation method of 1-methoxy-2-deoxy-L-ribose is claimed. Said method serves to continuously and cheaply prepare the compound without a purification process, improve preparation yield by avoiding the production of byproducts, and simplify the preparation procedures. The preparation method of 1-methoxy-2-deoxy-L-ribose (as represented by a certain formula; no data) comprises the reaction of suitable reactants with vinyl metals to provide products (no data). Said method also comprises the reaction of suitable reactant material with ozone to provide products which are treated with acid and methanol (no data). Substituent groups may be selected from H, C1-15 alkyl, C3-15 cycloalkyl, Ph, etc. (incomplete list). Vinyl metal is vinyl lithium or lithium divinyl. More narrow definitions are indicated; however, specific chemical structures and/or addnl. information are not provided here.

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:60523 CAPLUS
DN 140:94225
TI Method for producing 2-deoxy-L-ribose from 2-deoxy-D-ribose
IN Kang, Jae-Sung; Yun, Mi-Hong; Lee, Sang-Dae; Jeon, Byoung-Chan; Shin, Jeong-Ah
PA Samchully Pharm. Co., Ltd., S. Korea
SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004007513	A1	20040122	WO 2003-KR1398	20030715
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	KR 2004006826	A	20040124	KR 2002-41378	20020715
	CA 2492558	A1	20040122	CA 2003-2492558	20030715
	AU 2003281047	A1	20040202	AU 2003-281047	20030715
	EP 1556396	A1	20050727	EP 2003-741579	20030715
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2005176950	A1	20050811	US 2003-521022	20030715
	CN 1668626	A	20050914	CN 2003-816606	20030715
	JP 2005538080	T	20051215	JP 2004-521271	20030715
	IN 2005KN00186	A	20051104	IN 2005-KN186	20050214
PRAI	KR 2002-41378	A	20020715		
	WO 2003-KR1398	W	20030715		

OS CASREACT 140:94225; MARPAT 140:94225

AB The present invention relates to a economic synthetic method of 2-deoxy-L-ribose from 2-deoxy-D-ribose with easy reaction, separation and purification The present invention consists of four steps including protection, activation 3-and 4-OH groups, inversion and deprotection step. In respect to the cost for equipment, reagent and

operation, by the present invention, 2-deoxy-L
-ribose can be produced more economically because the invention
uses 2-deoxy-L-ribose which is
abundant in nature and easily synthesized from D-glucose, and adopt simple
and yielding process.
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s Yun Mi-Hong/AU
L9 10 YUN MI-HONG/AU

=> s l9 and 2-deoxy-L-ribose
9154777 2
53664 DEOXY
1564596 L
27946 RIBOSE
171 RIBOSES
28016 RIBOSE
(RIBOSE OR RIBOSES)
62 2-DEOXY-L-RIBOSE
(2(W)DEOXY(W)L(W)RIBOSE)
L10 2 L9 AND 2-DEOXY-L-RIBOSE

=> dis l10 1-2 bib abs

L10 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:1240711 CAPLUS
DN 146:317149
TI Preparation method for 1-methoxy-2-deoxy-L-
ribose without purification process for improving preparation
yield and reducing production costs
IN Kang, Jae Sung; Kim, Kyung Il; Yun, Mi Hong; Yu, Gi Weon; Chang,
Sun Ki; Kim, Min Kyu; Yi, Jeong Wu; Lee, Kwang Kuk
PA Samchully Pharm. Co., Ltd., S. Korea
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DT Patent
LA Korean
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI KR 2006072554	A	20060628	KR 2004-111227	20041223
PRAI KR 2004-111227		20041223		

AB A preparation method of 1-methoxy-2-deoxy-L-
ribose is claimed. Said method serves to continuously and cheaply
prepare the compound without a purification process, improve preparation yield
by
avoiding the production of byproducts, and simplify the preparation procedures.
The preparation method of 1-methoxy-2-deoxy-L-
ribose (as represented by a certain formula; no data) comprises
the reaction of suitable reactants with vinyl metals to provide products
(no data). Said method also comprises the reaction of suitable reactant
material with ozone to provide products which are treated with acid and
methanol (no data). Substituent groups may be selected from H, C1-15
alkyl, C3-15 cycloalkyl, Ph, etc. (incomplete list). Vinyl metal is vinyl
lithium or lithium divinyl. More narrow definitions are indicated;
however, specific chemical structures and/or addnl. information are not
provided here.

L10 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:60523 CAPLUS
DN 140:94225
TI Method for producing 2-deoxy-L-

ribose from 2-deoxy-D-ribose
IN Kang, Jae-Sung; Yun, Mi-Hong; Lee, Sang-Dae; Jeon, Byoung-Chan; Shin, Jeong-Ah
PA Samchully Pharm. Co., Ltd., S. Korea
SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004007513	A1	20040122	WO 2003-KR1398	20030715
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004006826	A	20040124	KR 2002-41378	20020715
CA 2492558	A1	20040122	CA 2003-2492558	20030715
AU 2003281047	A1	20040202	AU 2003-281047	20030715
EP 1556396	A1	20050727	EP 2003-741579	20030715
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005176950	A1	20050811	US 2003-521022	20030715
CN 1668626	A	20050914	CN 2003-816606	20030715
JP 2005538080	T	20051215	JP 2004-521271	20030715
IN 2005KN00186	A	20051104	IN 2005-KN186	20050214
PRAI KR 2002-41378	A	20020715		
WO 2003-KR1398	W	20030715		

OS CASREACT 140:94225; MARPAT 140:94225
AB The present invention relates to a economic synthetic method of 2-deoxy-L-ribose from 2-deoxy-D-ribose with easy reaction, separation and purification The present invention consists of four steps including protection, activation 3-and 4-OH groups, inversion and deprotection step. In respect to the cost for equipment, reagent and operation, by the present invention, 2-deoxy-L-ribose can be produced more economically because the invention uses 2-deoxy-L-ribose which is abundant in nature and easily synthesized from D-glucose, and adopt simple and yielding process.
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> s Lee Sang-Dae/AU
L11         54 LEE SANG-DAE/AU

=> s l11 and 2-deoxy-L-ribose
       9154777 2
         53664 DEOXY
       1564596 L
         27946 RIBOSE
           171 RIBOSES
         28016 RIBOSE
                 (RIBOSE OR RIBOSES)
            62 2-DEOXY-L-RIBOSE
                 (2(W)DEOXY(W)L(W)RIBOSE)
L12          2 L11 AND 2-DEOXY-L-RIBOSE
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=> dis l12 1-2 bib abs

L12  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2007 ACS on STN
AN   2004:978369  CAPLUS
DN   142:155333
TI   Process for preparing 2-deoxy-L-
     ribose from D-arabinose
IN   Jun, Byeong Chan; Kang, Jae Seong; Lee, Sang Dae; Shin, Jeong
     A.; Yoon, Mi Hong
PA   Samchully Pharm. Co., Ltd., S. Korea
SO   Repub. Korean Kongkae Taeho Kongbo, No pp. given
     CODEN: KRXXA7
DT   Patent
LA   Korean
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   KR 2003038220        A     20030516    KR 2001-69915          20011110
PRAI KR 2001-69915              20011110
AB   A process for preparing 2-deoxy-L-
     ribose from D-arabinose is provided, therefore 2-
     deoxy-L-ribose can be cheaply mass-prepared by
     using cheap reagents having less toxicity under mild conditions.  A
     process for preparing 2-deoxy-L-ribose
     of the formula(1) from D-arabinose comprises the steps of: forming epoxide
     rings at 2, 3-sites of D-arabinose to prepare an epoxy compound; reducing the
     epoxy ring compound to prepare a 2-deoxy compound; and inversion of the spatial
     structure of 4-OH in the 2-deoxy compound to prepare a L-type compound

L12  ANSWER 2 OF 2  CAPLUS  COPYRIGHT 2007 ACS on STN
AN   2004:60523  CAPLUS
DN   140:94225
TI   Method for producing 2-deoxy-L-
     ribose from 2-deoxy-D-ribose
IN   Kang, Jae-Sung; Yun, Mi-Hong; Lee, Sang-Dae; Jeon, Byoung-Chan;
     Shin, Jeong-Ah
PA   Samchully Pharm. Co., Ltd., S. Korea
SO   PCT Int. Appl., 15 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2004007513        A1    20040122    WO 2003-KR1398         20030715
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
             TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     KR 2004006826         A     20040124    KR 2002-41378          20020715
     CA 2492558            A1    20040122    CA 2003-2492558        20030715
     AU 2003281047         A1    20040202    AU 2003-281047         20030715
     EP 1556396            A1    20050727    EP 2003-741579         20030715
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 2005176950         A1    20050811    US 2003-521022         20030715
     CN 1668626            A     20050914    CN 2003-816606         20030715
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     JP 2005538080         T     20051215    JP 2004-521271          20030715
     IN 2005KN00186        A     20051104    IN 2005-KN186           20050214
PRAI KR 2002-41378         A     20020715
     WO 2003-KR1398        W     20030715
OS   CASREACT 140:94225; MARPAT 140:94225
AB   The present invention relates to a economic synthetic method of 2
     -deoxy-L-ribose from 2-deoxy-D-ribose with
     easy reaction, separation and purification  The present invention consists of
four
     steps including protection, activation 3-and 4-OH groups, inversion and
     deprotection step.  In respect to the cost for equipment, reagent and
     operation, by the present invention, 2-deoxy-L
     -ribose can be produced more economically because the invention
     uses 2-deoxy-L-ribose which is
     abundant in nature and easily synthesized from D-glucose, and adopt simple
     and yielding process.
RE.CNT  6     THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT


=> s Jeon Byoung-Chan/AU
L13           1 JEON BYOUNG-CHAN/AU

=> dis l13 bib abs

L13  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2007 ACS on STN
AN   2004:60523  CAPLUS
DN   140:94225
TI   Method for producing 2-deoxy-L-ribose from 2-deoxy-D-ribose
IN   Kang, Jae-Sung; Yun, Mi-Hong; Lee, Sang-Dae; Jeon, Byoung-Chan;
     Shin, Jeong-Ah
PA   Samchully Pharm. Co., Ltd., S. Korea
SO   PCT Int. Appl., 15 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
PI   WO 2004007513         A1    20040122    WO 2003-KR1398          20030715
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
             TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     KR 2004006826         A     20040124    KR 2002-41378           20020715
     CA 2492558            A1    20040122    CA 2003-2492558         20030715
     AU 2003281047         A1    20040202    AU 2003-281047          20030715
     EP 1556396            A1    20050727    EP 2003-741579          20030715
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 2005176950         A1    20050811    US 2003-521022          20030715
     CN 1668626            A     20050914    CN 2003-816606          20030715
     JP 2005538080         T     20051215    JP 2004-521271          20030715
     IN 2005KN00186        A     20051104    IN 2005-KN186           20050214
PRAI KR 2002-41378         A     20020715
     WO 2003-KR1398        W     20030715
OS   CASREACT 140:94225; MARPAT 140:94225
AB   The present invention relates to a economic synthetic method of
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2-deoxy-L-ribose from 2-deoxy-D-ribose with easy reaction, separation and purification The present invention consists of four steps including protection, activation 3-and 4-OH groups, inversion and deprotection step. In respect to the cost for equipment, reagent and operation, by the present invention, 2-deoxy-L-ribose can be produced more economically because the invention uses 2-deoxy-L-ribose which is abundant in nature and easily synthesized from D-glucose, and adopt simple and yielding process.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s Shin Jeong-Ah/AU
L14 4 SHIN JEONG-AH/AU

=> dis l14 1-4 bib abs

L14 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:234074 CAPLUS
TI The usefulness of ischemia modified albumin as an early ischemic marker to detect coronary artery disease in patients with chest pain presenting to the emergency department
AU Jang, Eun Chul; Jeon, Hui Kyung; Kim, Seong Hun; Shin, Dong Il; Jeong, Hae Bin; Shin, Jeong Ah; Shin, Woo Sung; Jang, Ki Yuk; Kim, Young Sik; Lee, Hae Kyung; Choi, Kyoung Ho; Youn, Ho Joong; Chung, Wook Sung; Kim, Jae Hyung; Hong, Soon Jo; Seung, Ki Bae
CS Department of Internal Medicine, College of Medicine, The Catholic University of Korea, Seoul, S. Korea
SO Korean Journal of Medicine (2006), 71(6), 620-626
CODEN: KJMOA5; ISSN: 1738-9364
PB Korean Association of Internal Medicine
DT Journal
LA Korean
AB Background: A diagnosis of coronary artery disease (CAD) in the early phase of acute chest pain is often difficult in an emergency department (ED) due to the lower sensitive ECG and delayed expression of the cardiac necrosis markers. Ischemia modified albumin (IMA) has recently been reported to be an early sensitive biochem. marker of ischemia. The aim of this study was to evaluate the diagnostic value of IMA in patients with suspected CAD and less sensitive ECG/delayed cardiac necrosis markers. Methods: 100 consecutive patients presenting to the ED with suspected CAD and chest pain within 6 h of chest pain were enrolled in this study. An ECG check and blood sampling for IMA and CK-MB, cardiac troponin-T (TnT) were done within 1 h at the ED. The diagnosis of CAD was based upon the clin. findings, results of serial ECG/TnT and coronary angiog. The ideal cutoff value of IMA for CAD was calculated by the Receiver Operator Characteristic (ROC) curve anal. Results: CAD including acute coronary syndrome was diagnosed in 69/100 (69%). The optimum diagnostic cutoff point for the IMA levels in these study populations was found by ROC anal. to be 99.5 U/mL. The ROC curve area for the IMA test was 0.901 (95% confidential interval, 0.840-0.961, p=0.001). The IMA levels >99.5 U/mL demonstrated a sensitivity of 86%, specificity of 81%, pos. predictive value of 90% and neg. predictive value of 74% for the diagnosis of CAD. The combination of IMA-ECG-CKMB/TnT increased the sensitivity for detecting ischemia to 94%, with a neg. predictive value of 85%. IMA is a highly sensitive with a high neg. predictive value, and might improve the utility of standard biomarkers for CAD. Conclusions: IMA might be a useful ischemic marker of coronary artery disease in patients presenting within 6 h after the onset of chest pain.

L14 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:1007865 CAPLUS
DN 143:261647
TI Interleukin-25 and interleukin-13 production by alveolar macrophages in

response to particles
AU Kang, Chun-Mi; Jang, An-Soo; Ahn, Mi-Hyun; Shin, Jeong-Ah; Kim, Ji-Hye; Choi, Yun-Sung; Rhim, Tai-Youn; Park, Choon-Sik
CS Genome Research Center for Allergy and Respiratory Diseases, Soonchunhyang University Hospital, Bucheon, S. Korea
SO American Journal of Respiratory Cell and Molecular Biology (2005), 33(3), 290-296
CODEN: AJRBEL; ISSN: 1044-1549
PB American Thoracic Society
DT Journal
LA English
AB Particle inhalation-induced lung inflammation acts as an adjuvant to allergens or respiratory viral infection in a process that is mediated by macrophages and epitheliums. The production of interleukin (IL)-4 and IL-13 by activated T cells is involved in the augmentation of Th2-type immune responses to particles, and IL-25 induces the synthesis of IL-4 and IL-13. However, whether IL-13 and IL-25 are directly regulated by particle instillation in the lung was not studied. The aim of this study was to reveal particle induction of IL-13 and IL-25 in the lung. TiO2 instillation potently induced the mRNA expression for IL-25 and IL-13 in lung tissue exts. 24 h after treatment, as compared with the sham group. Immunostaining for IL-25 and IL-13 showed strong positivity for macrophages in the inflammatory lung lesions of TiO2-treated rats. The alveolar macrophages expressed IL-25 and IL-13 24 h after in vitro stimulation with TiO2 particles in dose- and time-dependent manners, with maximal induction at 24 and 48 h after stimulation, resp. The sequence of the rat IL-25 gene is 95% homologous with the mouse IL-25 gene. These findings indicate that alveolar macrophages play an important role in particle-induced lung inflammation via direct induction of IL-13 and IL-25 production
RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:60523 CAPLUS
DN 140:94225
TI Method for producing 2-deoxy-L-ribose from 2-deoxy-D-ribose
IN Kang, Jae-Sung; Yun, Mi-Hong; Lee, Sang-Dae; Jeon, Byoung-Chan; Shin, Jeong-Ah
PA Samchully Pharm. Co., Ltd., S. Korea
SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004007513	A1	20040122	WO 2003-KR1398	20030715
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004006826	A	20040124	KR 2002-41378	20020715
CA 2492558	A1	20040122	CA 2003-2492558	20030715
AU 2003281047	A1	20040202	AU 2003-281047	20030715
EP 1556396	A1	20050727	EP 2003-741579	20030715
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

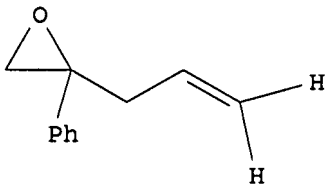
	US 2005176950	A1	20050811	US 2003-521022	20030715
	CN 1668626	A	20050914	CN 2003-816606	20030715
	JP 2005538080	T	20051215	JP 2004-521271	20030715
	IN 2005KN00186	A	20051104	IN 2005-KN186	20050214
PRAI	KR 2002-41378	A	20020715		
	WO 2003-KR1398	W	20030715		

OS CASREACT 140:94225; MARPAT 140:94225

AB The present invention relates to a economic synthetic method of 2-deoxy-L-ribose from 2-deoxy-D-ribose with easy reaction, separation and purification The present invention consists of four steps including protection, activation 3-and 4-OH groups, inversion and deprotection step. In respect to the cost for equipment, reagent and operation, by the present invention, 2-deoxy-L-ribose can be produced more economically because the invention uses 2-deoxy-L-ribose which is abundant in nature and easily synthesized from D-glucose, and adopt simple and yielding process.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:314384 CAPLUS
DN 135:180663
TI Indium-mediated allylation reactions of α-chlorocarbonyl compounds and preparation of allylic epoxides
AU Shin, Jeong Ah; Choi, Kyung Il; Pae, Ae Nim; Koh, Hun Yeong; Kang, Han-Young; Cho, Yong Seo
CS Biochemicals Research Center, Korea Institute of Science and Technology, Cheongryang, Seoul, 130-650, S. Korea
SO Journal of the Chemical Society, Perkin Transactions 1 (2001), (9), 946-948
CODEN: JCSPCE; ISSN: 1472-7781
PB Royal Society of Chemistry
DT Journal
LA English
OS CASREACT 135:180663
GI



AB Indium-mediated allylation of α-chlorocarbonyl compds. with various allyl bromides in aqueous media gave the corresponding homoallylic chlorohydrins, which could be transformed into the corresponding epoxides in the presence of a base. Thus, PhCOCH2Cl reacted with allyl bromide to give the chlorohydrin H2C:CHCH2C(OH)PhCH2Cl, which was then epoxided to give the epoxide I. These reactions were strongly dependent upon both the substituents at the carbon bearing chlorine and the allyl bromides used.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> dis hist

(FILE 'HOME' ENTERED AT 15:03:59 ON 17 MAY 2007)

FILE 'CASREACT' ENTERED AT 15:04:19 ON 17 MAY 2007

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L3           11 S L1 SSS FULL

     FILE 'CAPLUS' ENTERED AT 15:09:04 ON 17 MAY 2007
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L5           44 S L4 AND (PRODUCTION OR PRODUCING OR MAKING OR SYNTHE? OR PROCE
L6           12 S L5 AND 2-DEOXY-D-RIBOSE
L7           14 S KANG JAE-SUNG/AU
L8            2 S L7 AND 2-DEOXY-L-RIBOSE
L9           10 S YUN MI-HONG/AU
L10           2 S L9 AND 2-DEOXY-L-RIBOSE
L11          54 S LEE SANG-DAE/AU
L12           2 S L11 AND 2-DEOXY-L-RIBOSE
L13           1 S JEON BYOUNG-CHAN/AU
L14           4 S SHIN JEONG-AH/AU

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FULL ESTIMATED COST                                   261.08     425.40

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -51.48     -51.48

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FILE CONTENT:1840 - 12 May 2007 VOL 146 ISS 21

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database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance
identification.

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L5           44 S L4 AND (PRODUCTION OR PRODUCING OR MAKING OR SYNTHE? OR PROCE
L6           12 S L5 AND 2-DEOXY-D-RIBOSE
L7           14 S KANG JAE-SUNG/AU
L8            2 S L7 AND 2-DEOXY-L-RIBOSE
L9           10 S YUN MI-HONG/AU
L10           2 S L9 AND 2-DEOXY-L-RIBOSE
L11          54 S LEE SANG-DAE/AU
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L14           4 S SHIN JEONG-AH/AU

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